DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

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DEPARTMENT OF COMMERCE

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DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

THURSDAY, MARCH 1, 1990.

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE

WITNESSES

HON. ROBERT A. MOSBACHER, SECRETARY OF COMMERCE

THOMAS J. MURRIN, DEPUTY SECRETARY OF COMMERCE

WAYNE BERMAN, COUNSELLOR TO THE SECRETARY

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OTTO WOLFF, DEPUTY ASSISTANT SECRETARY FOR ADMINISTRATION

ALAN P. BALUTIS, DIRECTOR, BUDGET, PLANNING AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. This afternoon we have the Secretary of Commerce. I know that other members are due here in a minute but I think we should get started.

The total request for the department is $2,548,475,000, and that represents a reduction of a little over $1 billion. That is primarily because we don't have the cyclical census expenses we had last year.

We will insert the Department of Commerce Budget in Brief into the record at this point.

[The Commerce Budget in Brief and other summary materials follow:]

2

The Commerce Budget

IN BRIEF

FISCAL YEAR 1991

U.S. DEPARTMENT OF COMMERCE
Office of Budget

4

THE
COMMERCE
BUDGET
IN
BRIEF

FISCAL YEAR 1991

U.S. DEPARTMENT OF COMMERCE

ROBERT A. MOSBACHER, SECRETARY

THOMAS J. MURRIN, DEPUTY SECRETARY

THOMAS J. COLLAMORE ASSISTANT SECRETARY FOR ADMINISTRATION	ALAN P. BALUTIS DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION	MARK E. BROWN DIRECTOR OFFICE OF BUDGET

FOREWORD

The Department of Commerce is requesting $2,544 million in 1991, a decrease of $1,004 million from the FY 1990 enacted appropriation. The 1991 Commerce budget will support essential mission requirements to expand trade programs, conduct periodic censuses, improve economic data, automate the patent and trademark process, improve research for standards used by American industry, expand coastal ocean research and climate prediction capabilities, modernize and restructure the National Weather Service, and reinvigorate the Minority Business Development Agency.

The purpose of THE COMMERCE BUDGET IN BRIEF is to provide a summary of the President's annual budget request to Congress for Commerce by highlighting the budget request for FY 1991 and the changes from FY 1990. The major portion of the document furnishes information on appropriation accounts for which there are budget requests for FY 1991, or for which an appropriation was enacted in FY 1990.

The document presents for the Department, and for each program area, tables comparing permanent positions and amounts appropriated for FY 1990 and the estimate for FY 1991. For each appropriation account, data are presented on permanent positions and amounts by activities; for each activity, FY 1991 program changes from FY 1991 base requirements are briefly identified and explained. For purposes of tracking changes from FY 1990 to FY 1991 in the bureau description material, the FY 1990 appropriation is used as the base. The bureau description section starts on page 13.

The tables for each appropriation contain information substantially the same as the "Summary of Requirements" (salmon sheet) in the budget justification material submitted to the Appropriations Committees. Page references are made to the budget justifications.

The document includes information on budget authority, outlays and employment. This information will be useful to the general public in understanding the total program of the Department. The document also provides information on the Department's mission and objectives and FY 1991 budget requests requiring authorizing legislation.

January 1990

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INTRODUCTION

ORIGIN

The Department of Commerce was established on March 4, 1913 (37 Stat. 7365; U.S.C. 1501). Previously, labor and commerce activities had been performed by the Department of Commerce and Labor established by the Act of February 14, 1903.

COMMERCE GOALS

America's trade position and technological supremacy are now being challenged, and our competitors are aggressively pursuing their own interests as the world has become "a global marketplace." To compete successfully during the coming decades, the United States must offer the best products and services possible at the lowest costs. We must do "the right thing right the first time."

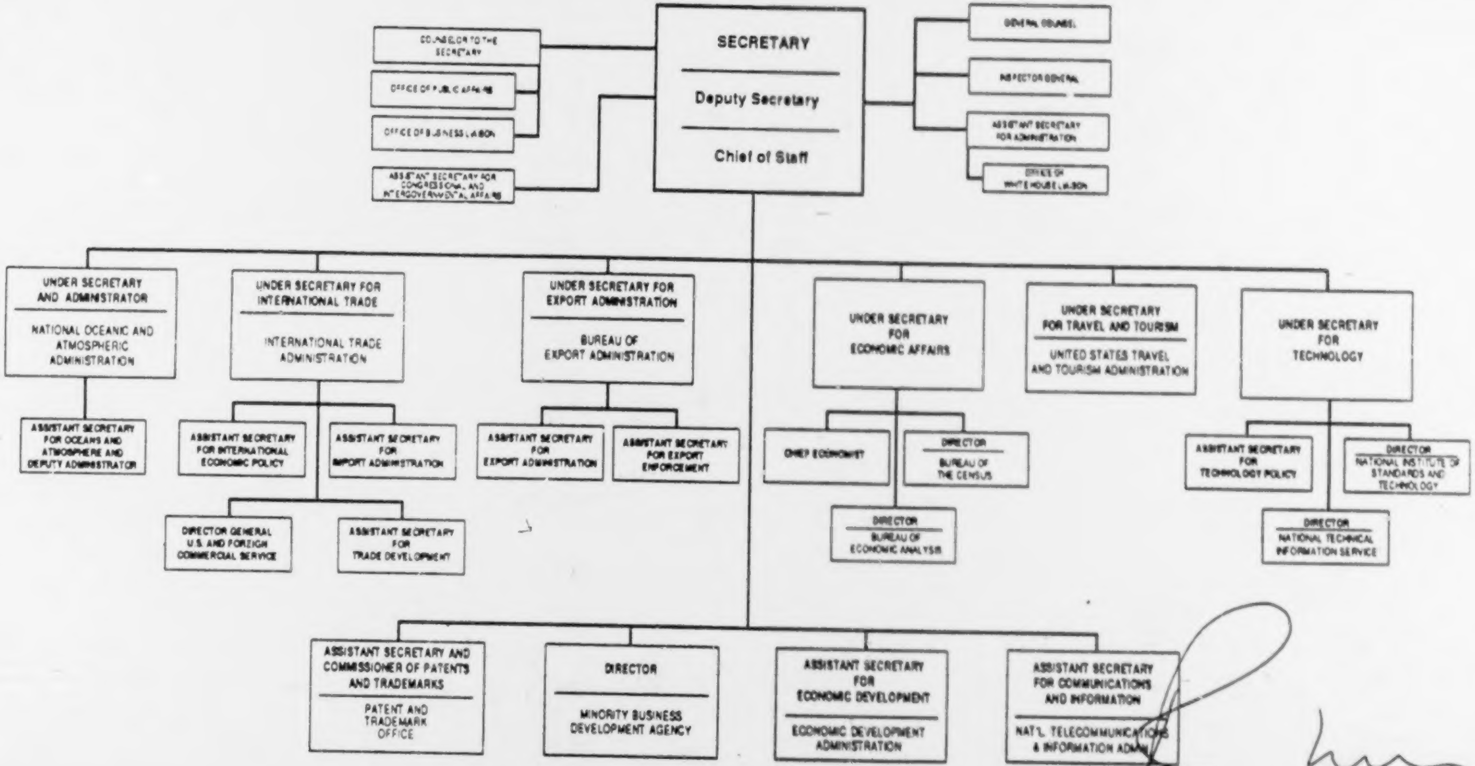
The nation can do this by providing higher quality products and services; making the most of human resources through greater educational opportunities; removing legal barriers that diminish our industries' competitiveness; increasing companies' opportunities to extend their longer-term vision by lowering the costs of capital; speeding up the commercialization of new technologies, linking environmental to competitive goals; and, promoting free trade and market-based economies.

Secretary Mosbacher has established a set of goals for meeting these needs. Those goals that have been designated part of President Bush's Management by Objectives program and are monitored by the Office of Management and Budget are listed below with an asterisk.

- * Define, enunciate, and implement the U.S. Government's role in export development.
- * Improve the U.S. trade position through securing freer and fairer trading conditions in international negotiations.
- Improve operations of the U.S. and Foreign Commercial Service.
- Operate a balanced export program for the nation that safeguards national security while reducing barriers to increased overseas sales.
- * Encourage national investment in research and development to meet national needs such as improving productivity and competitiveness.
- Establish a Total Quality Management Environment in the Department of Commerce.

U.S. DEPARTMENT OF COMMERCE

EXHIBIT TO DOO 1-1


SECRETARY
Deputy Secretary
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COUNSELOR TO THE SECRETARY
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UNDER SECRETARY FOR INTERNATIONAL TRADE
INTERNATIONAL TRADE ADMINISTRATION
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
ASSISTANT SECRETARY FOR IMPORT ADMINISTRATION
DIRECTOR GENERAL U.S. AND FOREIGN COMMERCIAL SERVICE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
UNDER SECRETARY FOR EXPORT ADMINISTRATION
BUREAU OF EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ENFORCEMENT
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CHIEF ECONOMIST
DIRECTOR
BUREAU OF THE CENSUS
DIRECTOR
BUREAU OF ECONOMIC ANALYSIS
UNDER SECRETARY FOR TRAVEL AND TOURISM
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
UNDER SECRETARY FOR TECHNOLOGY
ASSISTANT SECRETARY FOR TECHNOLOGY POLICY
DIRECTOR
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
PATENT AND TRADEMARK OFFICE
DIRECTOR
MINORITY BUSINESS DEVELOPMENT AGENCY
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
ECONOMIC DEVELOPMENT ADMINISTRATION
ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION
NAT'L TELECOMMUNICATIONS & INFORMATION ADMIN.

Approved Date

Amendment 23
September 7, 1989

- Provide data and information products and services to support governmental policy and meet public needs, including conducting a fair, accurate, and efficient 1990 decennial census on time.
- Improve the ability of the National Weather Service to provide better forecasts and warnings for public safety.
- Support a vigorous national effort to manage better our ocean and coastal environment through better understanding, monitoring, and prediction.
- Reinvigorate the Minority Business Development Agency.

FY 1991 BUDGET REQUEST

For FY 1991 the Department of Commerce requests a budget of $2,544 million, a decrease of $1,004 million from the FY 1990 appropriations to date. The principal reason for this reduction is the Department will have completed collecting data for the 1990 census. The FY 1991 budget request continues the 1990 Gramm-Rudman-Hollings Act across-the-board cuts to selected bureaus within the Commerce appropriation.

The Department seeks to cut or reduce programs whose missions have been achieved, activities that the private sector or state or local governments could provide better, and programs that have proven ineffective or are a low priority given fiscal constraints. The Department believes reducing specific programs is better than continuing across-the-board reductions on many high priority programs to meet deficit targets.

The Department proposes to eliminate or reduce the following Commerce programs in FY 1991:

- Economic development assistance programs.
- Public telecommunications facilities grants.
- Trade adjustment assistance for firms.
- Certain grants which subsidize the activities of specific industries.
- Certain revenue sharing arrangements with state and local governments.

These reductions, in addition to other program reductions, total $336 million. In addition to a $993 million reduction for the 1990 Census the Department needs $53 million to maintain the current level of services for programs not being reduced. The Department also requests an additional $271 million for program increases. The major requested increases are listed below.

Define, enunciate, and implement the U.S. Government's role in export development and improve the U.S. trade position through securing freer and fairer trading conditions in international negotiations.

- Additional funding is requested for the International Trade Administration (ITA) to further carry out provisions of the Omnibus Trade and Competitiveness Act of 1988. Additional resources are needed to process an increasing number of antidumping and countervailing duty cases as well as annual reviews of the final determinations of these cases.
- The Department is requesting additional funds to expand the foreign staffing of the U.S. and Foreign Commercial Service (US&FCS) in key overseas markets to support priority trade policy initiatives such as: 1) assisting U.S. exporters to take advantage of the European Community's establishment of a single internal market; 2) helping U.S. businesses take advantage of opportunities provided by the U.S.-Canada Free Trade Agreement; 3) promoting U.S. exports to Japan and other Pacific rim countries to build upon gains made by the U.S.-Japan structural impediments initiative, particularly the Japanese Government's commitment to undertake an import promotion program, and; 4) improving intellectual property rights protection in Latin American and Pacific rim countries.
- Additional resources are needed so ITA can support the Administration's initiative to negotiate an international consensus on steel trade practices and meet shorter deadlines for processing requests to import steel due to short supply.
- The Department also requests additional resources so ITA can support market reforms and increase U.S. business participation in the economies of East Europe and the Soviet Union.

Improve operations of the U.S. and Foreign Commercial Service.

- To ensure that it is providing the best service it can with available resources, the US&FCS will assess the allocation of its foreign and domestic resources. The Department requests additional resources for one year so the US&FCS can more effectively allocate its district office staff.
- Additional resources are needed to provide adequate security for overseas Foreign Commercial Service staff.
- The Department also requests additional resources so the Commercial Information Management System (CIMS) can provide information on export opportunities and foreign markets to U.S. businesses.

Operate a balanced export program for the nation that safeguards national security while reducing barriers to increased overseas sales.

- Increased funding will permit the Bureau of Export Administration (BXA) to maintain exporter assistance staff in Boston, Portland, and Northern California to help U.S. exporters follow export control regulations.

- Additional staff will allow BXA to review the Commodity Control List more frequently; help more exporters determine correct commodity classifications; and undertake reports required by the 1988 Trade Act, including reviewing the export control policies our major allies.

- Additional BXA staff are provided to analyze the effects on the U.S. industrial base of Defense Department Memoranda of Understanding (MOUs) on defense trade with other defense ministries and foreign offsets, and to ~~analyze the~~ effect on national security of foreign investment in defense-related industries.

Encourage national investment in research and development to meet national needs such as improving productivity and competitiveness

- This Administration intends to keep U.S. industry on a competitive footing in the global markets. The budget for the National Institute of Standards and Technology (NIST) requests substantial increases for core NIST research programs such as light wave technology, advanced semiconductor measurement issues, and robotics. These research programs form the technical basis for NIST's development of measurements and standards on which U.S. industries depend. Funding is also continued for the Manufacturing Technology Centers and the Advanced Technology Program.

- Developing technical assessments and policies that will help to efficiently introduce high definition television (HDTV) to the U.S. market is a high priority. The National Telecommunications and Information Administration (NTIA) needs additional resources to expand research that will provide information needed for the adoption of an HDTV transmission standard by the Federal Communications Commission.

- The prompt examination, registration, and dissemination of patent and trademark applications continue to be important in promoting American industrial and technological progress. In 1989, the Department achieved its goal of processing patent applications in an average of 18 months. In FY 1991, additional resources, primarily funded through user fees, are requested to handle projected increases in the number of patent and trademark applications and to disseminate issued patents and trademarks more effectively.

Establish a Total Quality Management Environment in the Department of Commerce.

- The Department will establish a Secretary's Quality Award for Commerce organizations, develop quality management plans by each bureau to be monitored through the Management by Objectives (MBO) process, and form a Commerce Quality Council chaired by the Deputy Secretary.

Provide data and information products and services to support governmental policy and meet public needs and take a fair and accurate census in 1990.

- The FY 1991 budget for Economic Affairs, which includes the Census Bureau, provides resources to process data collected by the Decennial Census. The Department must deliver apportionment counts to the President by December 31, 1990, and the Federal Government must provide the states data for redistricting on April 1, 1991.
- A series of initiatives are proposed to expand data collection and improve economic analysis used by key government decision-makers. Additional funds are requested to improve and expand data collection for business statistics, manufacturing statistics, foreign trade statistics, and general economic statistics. Also proposed are funds to improve demographic statistics, to modernize the Current Population Survey processing system, to restore the Survey of Income and Program Participation sample size and panels, and provide additional data sources for the National Trade Data Bank.
- Funds are requested for implementation of the principal recommendations of the Economic Policy Council's working Group on Improving Economic Statistics, to maintain the quality of the GNP and balance of payment estimates, to modernize and extend the U.S. national economic accounts and to improve the quality of international investment data.

Improve the ability of the National Weather Service (NWS) to provide better forecasts and warnings for public safety.

- The National Oceanic and Atmospheric Administration (NOAA) budget requests additional resources to continue the NWS modernization program. Full production and deployment of the Next Generation Radar units will continue. NOAA will continue modernizing its equipment to serve the country's weather observing and forecast needs into the next century.
- Additional resources are also needed to continue procuring replacement meteorological satellites, a necessary part of a modernized Weather Service. Combined with the other systems being developed and deployed by NOAA, they will provide the NWS with the data to improve forecasts and warnings.

- The FY 1991 budget continues the Secretary's commitment of last year to maintain existing operations at weather stations.

Support a vigorous national effort to manage better our ocean and coastal environment through better understanding, monitoring, and prediction.

- The Administration's FY 1991 budget builds on the FY 1990 initiative in coastal ocean science. This endeavor is aimed at improving our understanding of the ocean's processes and capacities in the areas around the coasts of the United States. Information and research in this area will give the country's policy-makers better technical information when considering issues such as pollution, coastal development, and proper management of marine life.

- The Department is one of several agencies involved in the Federal Climate and Global Change Program. This Federal effort is coordinated through an interagency group, the Committee on Earth Sciences, sponsored by the President's Office of Science and Technology Policy. The Department, through NOAA, plays a crucial role in the monitoring of and research on climate change. Additional resources are necessary for the United States to address this issue adequately.

- Funds are provided for the launch of the LANDSAT-6 satellite. No funds are provided for the operation of the LANDSAT-4 and LANDSAT-5 satellites since the Department expects their operation to end in FY 1990. No funding is requested for satellites beyond LANDSAT-6 since the National Space Council is evaluating options for the future of the system.

Reinvigorate the Minority Business Development Agency (MBDA).

- Reinvigorating the Federal Government's assistance to minority businesses is a top priority for the Administration. The Department will focus on developing both public and private sector programs and formulating policies and guidelines for the minority Business Development Center (BDC) network. Additional resources will upgrade and strengthen MBDA's program to improve the quality of services provided and better meet the needs of local business communities.

- Additional resources will also strengthen MBDA's Resource Development program's partnership with state and local governments and the private sector. MBDA will work with these groups to provide assistance to minority businesses.

- Additional resources are requested to expand MBDA's advocacy, outreach, and research programs in order to offer better support for MBDA's enterprise and resource development activities and users of MBDA's services.

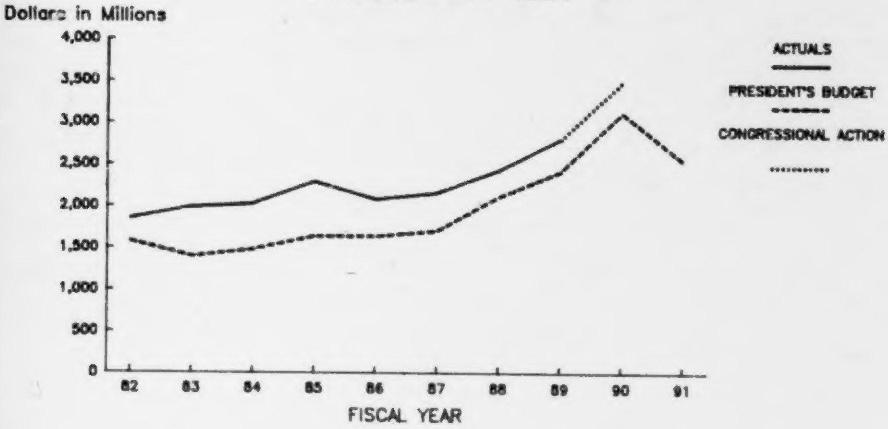
USER FEES

- o In developing the FY 1991 budget a central concern of the Department was that those who benefit from the Department's programs pay their fair share of the costs of running the programs. As a way to maintain services that benefit the U.S. while holding down the Federal budget deficit, we are proposing several new user fees.

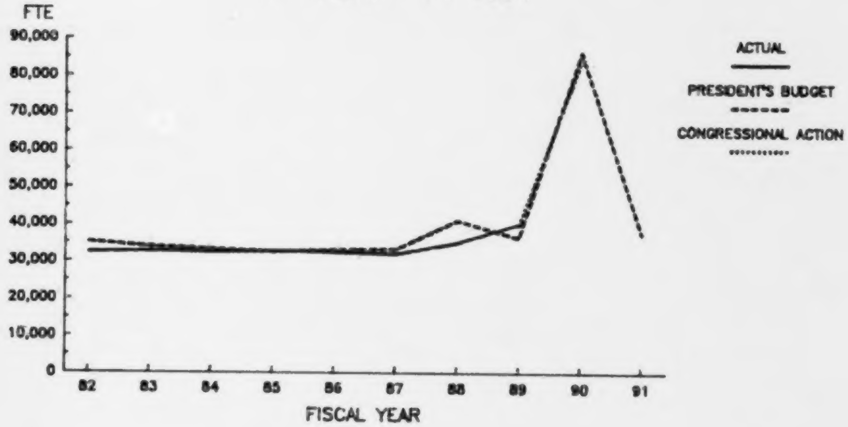
- o The U.S. Travel and Tourism Administration (USTTA) will continue to pursue a travel promotion fee to be assessed on airline and cruise ship carriers. Funds collected by this fee will go directly to the Treasury to reduce the Federal deficit and will not be used to reduce USTTA's appropriation.

- o Beginning in FY 1991, a transfer from the Harbor Maintenance Trust Fund will offset $45.5 million of the cost of NOAA's programs. The fund will provide resources for mapping and charting, tides and circulation, and marine weather programs. The Department, in conjunction with the Army Corps of Engineers, is developing a legislative proposal to increase the current user fee which will support the transfer.

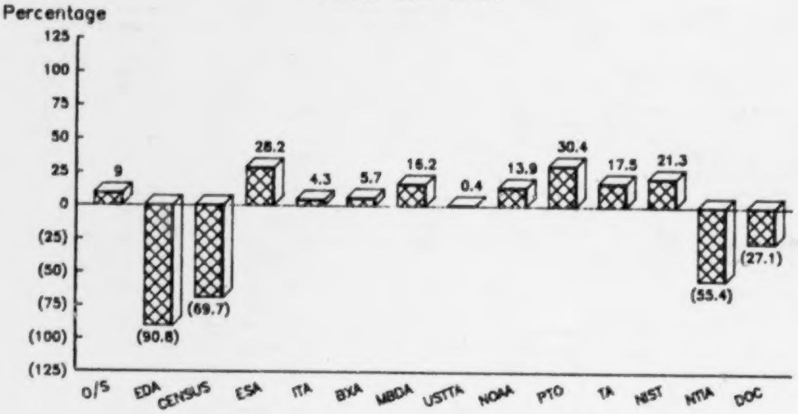
DEPARTMENT OF COMMERCE
Budget Authority
FY 1982 – FY 1991



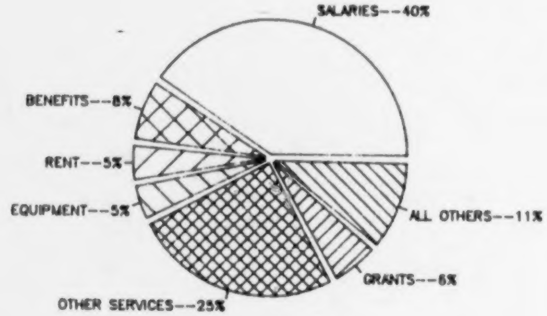
DEPARTMENT OF COMMERCE
FTE Employment
FY 1982 – FY 1991



DEPARTMENT OF COMMERCE
Change in Appropriations – Percent of Total
1990 vs. 1991



DEPARTMENT OF COMMERCE
Types of Expenditures – 1991



COMPARISON OF 1989, 1990, AND 1991 BUDGET AUTHORITY

(Dollar amounts in thousands)

	1989	1990 Enacted	1991 President's Budget		Change 1990 to 1991
			1990	1991	
General Administration	$40,404	$41,152	$41,152	$45,441	$4,289
Economic Development Administration	206,770	213,912	213,912	20,000	(193,912)
Bureau of the Census	655,351	1,414,726	1,414,726	431,337	(983,389)
Economic and Statistical Analysis	32,899	30,908	30,908	39,948	9,040
International Trade Administration	167,502	178,859	178,859	189,020	10,161
Bureau of Export Administration	40,106	41,416	41,416	44,373	2,957
Minority Business Development Agency	39,705	39,741	39,741	46,161	6,420
United States Travel and Tourism Administration	13,800	14,122	14,122	14,362	240
National Oceanic and Atmospheric Administration	1,296,101	1,290,239	1,290,239	1,387,563	97,324
Patent and Trademark Office	109,000	85,900	85,900	112,027	26,127
Technology Administration		3,875	3,875	4,583	708
National Institute of Standards and Technology	159,000	163,845	163,845	198,408	34,563
National Telecommunications and Information Admin.	33,630	34,002	34,002	15,252	(18,750)
Subtotal, Federal funds	2,794,268	3,552,697	3,552,697	2,548,475	(1,004,222)
Trust funds	73,031	79,783	79,783	87,721	7,938
Offsetting receipts	(59,888)	(74,838)	(74,838)	(91,940)	(17,102)
Subtotal, Department of Commerce	2,807,411	3,557,642	3,557,642	2,544,256	(1,013,386)
Proposed for later transmittal:					
National Oceanic and Atmospheric Administration					
Operations, research & facilities, Federal funds				(45,481)	(45,481)
Marine Waterways Trust Fund				45,481	45,481
Total, Department of Commerce	2,807,411	3,557,642	3,557,642	2,544,256	(1,013,386)

COMPARISON OF 1989, 1990, AND 1991 OUTLAYS

(Dollar amounts in thousands)

	1989	1990	1991	Change 1990 to 1991
General Administration	$32,205	$44,026	$46,878	$2,852
Economic Development Administration	214,535	206,539	189,527	(17,012)
Bureau of the Census	557,159	1,618,967	443,095	(1,175,872)
Economic and Statistical Analysis	31,159	31,842	38,953	7,111
Regional Development Program	44	35	(440)	(475)
International Trade Administration	178,063	167,642	185,400	17,758
Bureau of Export Administration	43,284	41,439	44,254	2,815
Minority Business Development Agency	39,604	39,319	48,247	8,928
United States Travel and Tourism Administration	12,312	13,074	14,310	1,236
National Oceanic and Atmospheric Administration	1,161,480	1,355,272	1,421,535	66,263
Patent and Trademark Office	107,732	122,313	111,978	(10,335)
Technology Administration		3,332	4,484	1,152
National Institute of Standards and Technology	147,838	173,991	189,465	15,474
National Telecommunications and Information Admin.	30,731	39,129	35,920	(3,209)
Subtotal, Federal funds	2,556,146	3,856,920	2,773,606	(1,083,314)
Trust funds	74,429	79,083	88,861	9,778
Offsetting receipts	(59,888)	(74,838)	(91,940)	(17,102)
Subtotal, Department of Commerce	2,570,687	3,861,165	2,770,527	(1,090,638)
Proposed for later transmittal:				
National Oceanic and Atmospheric Administration				
Operations, research & facilities, Federal funds			(45,481)	(45,481)
Marine Waterways Trust Fund			45,481	45,481
Total, Department of Commerce	2,570,687	3,861,165	2,770,527	(1,090,638)

COMPARISON OF 1989, 1990, AND 1991 TOTAL FULL-TIME EQUIVALENTS (WORKYEARS)
FINANCED FROM ALL SOURCES OF FUNDS

	1989	1990 Enacted	1991	Change 1990 - 1991
General Administration	1,275	1,291	1,314	23
Economic Development Administration	343	340	200	(140)
Bureau of the Census	15,059	58,925	11,352	(47,573)
Economic and Statistical Analysis	517	510	593	83
International Trade Administration	2,218	2,333	2,452	119
Bureau of Export Administration	496	559	580	21
Minority Business Development Agency	205	207	213	6
United States Travel and Tourism Administration	81	91	91	0
National Oceanic and Atmospheric Administration	12,515	12,498	12,384	(114)
Patent and Trademark Office	3,719	3,844	4,441	597
Technology Administration	339	377	405	28
National Institute of Standards and Technology	3,087	3,093	3,209	116
National Telecommunications and Information Administration	269	281	273	(8)
Subtotal, Department of Commerce	40,123	84,349	37,507	(46,842)
Proposed for later transmittal:				
National Oceanic and Atmospheric Administration			[752]	[752]
Total, Department of Commerce	40,123	84,349	37,507	(46,842)

COMPARISON OF 1989, 1990, AND 1991 EMPLOYMENT IN PERMANENT POSITIONS
FINANCED FROM ALL SOURCES OF FUNDS

	1989	1990 Enacted	1991	Change 1990 - 1991
General Administration	1,147	1,343	1,366	23
Economic Development Administration	325	360	160	(200)
Bureau of the Census	6,195	7,906	8,711	805
Economic and Statistical Analysis	474	598	698	100
International Trade Administration	2,049	2,474	2,605	131
Bureau of Export Administration	479	569	598	29
Minority Business Development Agency	188	216	224	8
United States Travel and Tourism Administration	85	91	91	0
National Oceanic and Atmospheric Administration	11,462	11,443	11,344	(99)
Patent and Trademark Office	3,724	3,898	4,765	867
Technology Administration	325	419	445	26
National Institute of Standards and Technology	2,758	2,828	3,107	279
National Telecommunications and Information Administration	245	267	256	(11)
Subtotal, Department of Commerce	29,456	32,412	34,370	1,958
Proposed for later transmittal:				
National Oceanic and Atmospheric Administration			[752]	[752]
Total, Department of Commerce	29,456	32,412	34,370	1,958

GENERAL ADMINISTRATION

General Administration provides salaries and expenses for the Secretary, Deputy Secretary and staff of the Office of the Secretary and is the central management and administrative control point for budgetary and policy functions affecting Department goals and objectives. The Office of the Secretary is also the primary liaison to the Office of Management and Budget and responds to executive branch and Congressional inquiries.

The Office of the Inspector General conducts audits, inspections and investigations to combat fraud, waste and abuse of Departmental resources, and to improve the efficiency and effectiveness of Commerce programs.

Summary

Appropriation

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$26,396	$27,821	$30,326	$2,505
Inspector general	14,008	13,331	15,115	1,784
TOTAL APPROPRIATION:	40,404	41,152	45,441	4,289

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	301	348	356	8
Inspector general	177	209	214	5
TOTAL APPROPRIATION:	478	557	570	13

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
General Administration				
Office of Space Commerce (GA-26)	5	$387	+1	+$100

Enhance coordination of space activities Departmentwide, and improve information dissemination to industry on key commercial space issues including foreign competition and industry trends.

Management & information systems (GA-27)	28	2,702	+3	+381

Expand oversight activities for major Commerce information systems including: research to identify cost effective alternative system configurations; identification of total life-cycle costs; and demonstration projects.

Office of Finance and Federal Assistance (GA-27)	30	2,352	+1	+117

Strengthen Departmental financial management controls including development of an integrated, Departmentwide Financial and Management Information System.

Procurement and administrative services (GA-26)	56	5,009	+3	+391

Enhance procurement oversight functions, including on-site reviews and coordination of major systems acquisitions planning.

Inspector General				
Office of Audits (GA-59)	131	8,698	0	+517

Improve the quality and timeliness of audits by hiring part-time and temporary staff with education and experience in: management and computer science; industrial, systems and software engineering; and economics.

Office of Inspections and Resource Management (GA-55)	28	1,951	+5	+390

Expand inspections of U.S. and Foreign Commercial Services (U.S. and FCS) field operations.

Comparison of Appropriation by Activity

General Administration: Salaries and expenses	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Executive direction of the department	36	$2,875	36	$3,088	36	$3,088		
Departmental staff services	265	24,946	312	26,249	320	27,238	8	$989
TOTAL DIRECT OBLIGATIONS:	301	27,821	348	29,337	356	30,326	8	989
REIMBURSABLE OBLIGATIONS:	26	36,996	26	36,996	26	36,852		(144)
TOTAL OBLIGATIONS:	327	64,817	374	66,333	382	67,178	8	845
FINANCING:								
Offsetting collections from:								
Federal funds	(26)	(36,996)	(26)	(36,996)	(26)	(36,852)		144
Subtotal, financing	(26)	(36,996)	(26)	(36,996)	(26)	(36,852)		144
TOTAL BUDGET AUTHORITY:	301	27,821	348	29,337	356	30,326	8	989
TOTAL APPROPRIATION:	301	27,821	348	29,337	356	30,326	8	989

Summary of Changes from 1990 Appropriation

General Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			348	$28,173
Reduction pursuant to P.L. 99-177				(352)
Appropriation currently available, 1990			348	27,821
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$704		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				704
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		478		
Less amount absorbed in FY 1991		(239)		
Subtotal, adjustment for 1991 pay increase				239

General Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		330		
Less amount absorbed in FY 1991		(165)		
Subtotal, adjustment for 1991 pay increase				165
OTHER COST CHANGES:				
Salaries and benefits:				
Extra compensable day		65		
FERS basic benefits and Thrift Plan		68		
Civil Service Retirement System		(31)		
Federal Insurance Contributions Act (FICA)		36		
Employees' Compensation Fund		3		
Other objects:				
Rental payments to GSA		152		
Communications, utilities & misc. charges		(57)		
Printing and Reproduction		69		
Working Capital Fund		92		
Supplies and materials		11		
Subtotal, other cost changes				408
TOTAL, adjustments to base:				1,516
1991 base			348	29,337
Program changes			8	989
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			356	30,326
TOTAL 1991 APPROPRIATION:			356	30,326

Comparison of Appropriation by Activity

General Administration: Office of the Inspector General	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Inspector General	209	$13,331	209	$14,208	214	$15,115	5	$907
TOTAL DIRECT OBLIGATIONS:	209	13,331	209	14,208	214	15,115	5	907
REIMBURSABLE OBLIGATIONS:				330		330		
TOTAL OBLIGATIONS	209	13,331	209	14,538	214	15,445	5	907
FINANCING:								
Offsetting collections from:								
Federal funds				(330)		(330)		
Subtotal, financing				(330)		(330)		
TOTAL BUDGET AUTHORITY:	209	13,331	209	14,208	214	15,115	5	907

Summary of Changes from 1990 Appropriation

General Administration: Office of the Inspector General	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			209	$13,500
Reduction pursuant to P.L. 99-177				(169)
Appropriation currently available, 1990			209	13,331
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$355		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				355
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		252		
Less amount absorbed in FY 1991		(126)		
Subtotal, adjustment for 1991 pay increase				126
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		94		
Less amount absorbed in FY 1991		(47)		
Subtotal, adjustment for 1991 pay increase				47
OTHER COST CHANGES:				
Salaries and benefits:				
Extra compensable day		35		
FERS basic benefits and Thrift Plan		46		
Civil Service Retirement System		(21)		
Federal Insurance Contributions Act (FICA)		22		
Health insurance premiums		106		
Employees' Compensation Fund		58		
Other objects:				
Rental payments to GSA		46		
Communications, utilities & misc. charges		(37)		
Supplies and Materials		3		
Working Capital Fund		91		
Subtotal, other cost changes				349
TOTAL, adjustments to base:				877
1991 base			209	14,208
Program changes			5	907
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			214	15,115
TOTAL 1991 APPROPRIATION:			214	15,115

ECONOMIC DEVELOPMENT ADMINISTRATION

The objectives of the Economic Development Administration (EDA) are to reduce substantial and persistent unemployment in economically distressed areas and to address problems of economic adjustment. The Administration proposes to terminate EDA programs in FY 1991 and to stimulate economic expansion and job creation in distressed areas through general tax, fiscal and regulatory reduction measures. In FY 1991, EDA and other grants and loans programs proposed by the Administration for termination will be merged in the Office of Grants and Loans Administration to facilitate closeout of these programs.

Summary

Appropriations

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Grants and loan administration	$24,742	$25,356	$20,000	($5,356)
Economic development assistance programs	182,028	188,556	0	(188,556)
TOTAL APPROPRIATION:	.206,770	213,912	20,000	(193,912)

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Grants & loan administration	325	360	160	(200)

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Increase/(Decrease) Amount
Grants and Loans Administration (EDA-3)	360	$26,605	200	-$6,605

Economic development programs will be discontinued in FY 1991. Administrative resources will be used to monitor and close out Departmental programs including: existing economic development grant and loan programs, Trade Adjustment Assistance (transferred to EDA in FY 1988), Public Telecommunications Facilities Program, Federal Ship Financing Fund, and Fisheries Loan Fund.

	Base Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Increase/(Decrease) Amount
Economic development assistance programs (EDA-18)	0	196,475	0	-196,475

The Administration proposes termination of EDA during FY 1991 as part of its policy of placing emphasis on the private sector and transferring primary responsibility for administering community and economic development assistance to State and local governments to resolve economic development problems.

Comparison of Appropriation by Activity

Economic Development Administration: Grants and loans administration	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Economic development assistance programs:								
Executive direction	26	$1,489	26	$1,561	6	$1,017	(20)	($544)
Grant programs	41	2,396	41	2,512	23	2,009	(18)	(503)
Loan programs	24	692	24	761	11	647	(13)	(114)
Management support	56	8,304	56	8,681	28	7,305	(28)	(1,376)
Regional operations	213	12,475	213	13,090	92	9,022	(121)	(4,068)
TOTAL DIRECT OBLIGATIONS:	360	25,356	360	26,605	160	20,000	(200)	(6,605)
REIMBURSABLE OBLIGATIONS:		792		792		635		(157)
TOTAL OBLIGATIONS:	360	26,148	360	27,397	160	20,635	(200)	(6,762)
FINANCING:								
Offsetting collections from:								
Federal funds		(792)				(635)		
Subtotal, financing		(792)				(635)		

Economic Development Administration: Grants and loans administration	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
TOTAL BUDGET AUTHORITY:	360	25,356			160	20,000		
TOTAL APPROPRIATION:	360	25,356			160	20,000		

Summary of Changes from 1990 Appropriation

Economic Development Administration: Grants and loans administration	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			360	$25,475
Reduction pursuant to P.L. 99-177				(119)
Appropriation currently available, 1990			360	25,356
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$610		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				610
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		562		
Less amount absorbed in FY 1991		(281)		
Subtotal, adjustment for 1991 pay increase				281
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		68		
Less amount absorbed in FY 1991		(34)		
Subtotal, adjustment for 1991 SES pay increase				34
OTHER COST CHANGES:				
Salaries and Benefits:				
Extra compensable day		60		
Civil Service Retirement System		(39)		
FERS basic benefits and Thrift Plan		83		
Federal Insurance Contributions Act (FICA)		40		
Health insurance premiums		160		
Employees' Compensation Fund		(54)		
Other objects:				
Rent payments to GSA		87		
Communications, utilities and misc. charges		(100)		
Printing and reproduction		5		
Working Capital Fund		79		
Supplies and materials		3		
Subtotal, other cost changes				324
TOTAL, adjustments to base:				1,249
1991 base			360	26,605
Program changes			(200)	(6,605)

Economic Development Administration: Grants and loans administration	Perm. Pos.	Amount	Perm. Pos.	Amount
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			160	20,000
TOTAL 1991 APPROPRIATION:			160	20,000

Comparison of Appropriation by Activity

Economic Development Administration; Economic development assistance programs:	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Planning grants:								
Districts		$15,119		$15,754				($15,754)
States		1,890		1,969				(1,969)
Indians		2,835		2,954				(2,954)
Urban		2,834		2,953				(2,953)
Subtotal		22,678		23,630				(23,630)
Technical assistance grants		6,613		6,891				(6,891)
Development grants		109,830		114,443				(114,443)
Economic adjustment grants		48,242		50,268				(50,268)
Research and evaluation		1,193		1,243				(1,243)
TOTAL OBLIGATIONS:		188,556		196,475				(196,475)
TOTAL BUDGET AUTHORITY		188,556						
TOTAL APPROPRIATION:		188,556						

Summary of Changes from 1990 Appropriation

Economic Development Administration; Economic development assistance programs:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990				$191,196
Reduction pursuant to P.L. 99-177				(2,640)
Appropriation currently available, 1990				188,556
ADJUSTMENTS TO BASE:				
OTHER COST CHANGES:				
Estimated cost increases		$7,919		
TOTAL, adjustments to base:				7,919
1991 base				196,475
Program changes				(196,475)
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):				
TOTAL 1991 APPROPRIATION:				

BUREAU OF THE CENSUS

The Bureau of the Census collects, compiles and publishes a broad range of current and periodic statistics including economic, social and demographic data on population, housing, agriculture, governments, foreign trade, manufacturing, construction, mineral industries, and retail, wholesale, and service trades. The Salaries and Expenses appropriation provides for monthly, quarterly and annual surveys, and other programs which require a constant annual funding level. The Periodic Censuses and Programs appropriation provides for decennial and quinquennial censuses, and other programs which are cyclical in nature. Additionally, individual surveys are conducted for other Federal agencies on a reimbursable basis.

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	$96,035	$99,890	$115,233	$15,343
Periodic censuses and programs	559,316	1,314,836	316,104	(998,732)
TOTAL APPROPRIATION	655,351	1,414,726	431,337	(983,389)

Permanent Positions

Appropriation:	1989	1990	1991 Estimate	Increase (Decrease)
Salaries and expenses	2,019	2,230	2,402	172
Periodic censuses and programs	2,448	3,544	4,177	633
TOTAL:	4,467	5,774	6,579	805

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)
Salaries and Expenses

	Base Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Increase/(Decrease) Amount
Business statistics (CEN-30)	346	$14,820	+91	+$3,910

Increases are proposed to improve the methods of reducing non-sampling errors in the Advanced Retail Sales Survey (+19 pos.; +$1,069), to expand the collection of corporate financial data (+9 pos.; +$450) and to collect annual detail for more service industries (+23 pos.; +$1,050). Increases also will improve the measurement of services purchased by industry (+16 pos.; +$523) and the collection of small company financial data (+12 pos.; +$418). Increases are provided to identify and publish new data for specific growth industries and to assign unique industrial classification codes to these emerging industries (+12 pos.; +$400).

Manufacturing statistics (CEN-52)	240	11,237	+57	+2,450

Increases are included to improve the quantity and quality of responses to the Manufacturer's Shipments, Inventories, and Orders (M3) Survey (+24 pos.; +$900) and to conduct an annual business investment survey on new and anticipated investment data at the national level (+43 pos.; +$2,000). This will complement Census' responsibility to collect actual data on investment and business plans. Funding for the Current Industrial Reports will be reduced (-10 pos.: -$450).

General economic statistics (CEN-68)	203	11,054	+4	+575

Increases are provided to research and revise the Standard Industrial Classification (SIC) codes (+4 pos.; +$375), and finance the National Trade Data Bank required by the Omnibus Trade and Competitiveness Act of 1988 (+0 pos.; +$200).

Foreign trade statistics (CEN-80)	413	17,381	+13	+500

An increase is provided to improve the quality of foreign trade statistics through educational efforts and follow-up programs.

Agriculture statistics
(CEN-98) 14 414 -14 -414

The agriculture statistics program on cotton ginning will be discontinued.

Demographic surveys
(CEN-105) 486 29,453 +49 +2,826

Increases will modernize the Current Population Survey processing system (+15 pos.; +$826), and begin the restoration of the Survey of Income and Program Participation (SIPP) sample to its optimal size by introducing a new panel of 14,000 households (+34 pos.; +$2,000).

Demographic reports
(CEN-122) 104 3,030 +1 +250

This increase will provide a review of the Metropolitan Statistical Area (MSA) concepts and for the development of associated statistical standards.

Data Systems Development
(CEN-142) 13 592 0 -119

Fewer data system development contracts will be issued.

Periodic Censuses and Programs

Year 2000 decennial census
(Cen-200) 12 784 +11 +747

This increase will fund the early preparation and planning, including research and development for the Year 2000 Decennial Census.

Comparison of Appropriation by Activity

Bureau of the Census: Salaries and expenses	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Current economic statistics								
Business statistics	346	$13,739	346	$14,820	437	$18,730	91	$3,910
Construction statistics	184	7,731	184	8,170	184	8,170		
Manufacturing statistics	252	10,884	240	11,237	297	13,687	57	2,450
General economic statistics	207	10,346	203	11,054	207	11,629	4	575
Foreign trade statistics	413	16,213	413	17,381	426	17,881	13	500
Government statistics	125	5,086	119	5,211	119	5,211		
Agriculture statistics	14	413	14	414			(14)	(414)
Subtotal	1,541	64,412	1,519	68,287	1,670	75,308	151	7,021

Bureau of the Census: Salaries and expenses	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
Current demographic statistics								
Demographic surveys	486	27,969	486	29,453	535	32,279	49	2,826
Demographic reports	111	3,183	104	3,030	105	3,280	1	250
International statistics	18	685	18	733	18	733		
Housing statistics	15	577	15	615	15	615		
Subtotal	630	32,414	623	33,831	673	36,907	50	3,076
Other programs and publications								
Statistical abstract and supplements	33	1,683	33	1,796	33	1,796		
General research	13	701	13	749	13	749		
Data systems development	13	680	13	592	13	473		(119)
Subtotal	59	3,064	59	3,137	59	3,018		(119)
TOTAL DIRECT OBLIGATIONS:	2,230	99,890	2,201	105,255	2,402	115,233	201	9,978
REIMBURSABLE OBLIGATIONS:	1,675	96,000	1,675	96,000	1,675	96,000		
TOTAL OBLIGATIONS:	3,905	195,890	3,876	201,255	4,077	211,233	201	9,978
FINANCING:								
Offsetting collections from:								
Federal funds	(1,525)	(88,000)			(1,525)	(88,000)		
Non-Federal sources	(150)	(8,000)			(150)	(8,000)		
Subtotal, financing	(1,675)	(96,000)			(1,675)	(96,000)		
TOTAL BUDGET AUTHORITY:	2,230	99,890			2,402	115,233		
TOTAL APPROPRIATION:	2,230	99,890			2,402	115,233		

Summary of Changes from 1990 Appropriation

Bureau of the Census: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			2,265	$101,288
Reduction pursuant to P.L. 99-177			(35)	(1,398)
Appropriation currently available, 1990			2,230	99,890
ADJUSTMENTS TO BASE:				
TRANSFERS:				
To Economic and Statistical Analysis, Reimbursable			(4)	
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$2,512		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				2,512
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		2,038		
Less amount absorbed in FY 1991		(1,019)		
Subtotal, adjustment for 1991 pay increase				1,019

Bureau of the Census: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		154		
Less amount absorbed in FY 1991		(77)		
Subtotal, adjustment for 1991 pay increase				77
Delete Unfunded Positions			(25)	
OTHER COST CHANGES:				
Salaries and benefits:				
Annualization		124		
FERS basic benefits and Thrift Plan		382		
Civil Service Retirement System		(176)		
Federal Insurance Contribution Act (FICA)		180		
Health insurance premium		557		
Employees' compensation fund		148		
Extra compensable day		258		
Other objects:				
Rent payments to GSA		324		
Federal Telecommunications System		(674)		
Printing and reproduction		186		
Supplies and materials		70		
Working Capital Fund		54		
Other services		324		
Subtotal, other cost changes				1,757
TOTAL, adjustments to base:			(29)	5,365
1991 base			2,201	105,255
Program changes			201	9,978
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			2,402	115,233
TOTAL 1991 APPROPRIATION:			2,402	115,233

Comparison of Appropriation by Activity

Bureau of the Census: Periodic censuses and programs	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Economic statistics programs:								
Economic censuses	404	$15,596	299	$17,249	299	$17,249		
Census of governments	33	1,866	62	1,645	62	1,645		
Census of agriculture	218	8,582	200	10,859	200	10,859		
Subtotal	655	26,044	561	29,753	561	29,753		
Demographic statistics programs:								
Intercensal demographic estimates	63	3,335	60	3,457	60	3,457		
Decennial census	2,562	1,238,770	3,288	245,789	3,288	245,789		
Year 2000 decennial census			12	784	23	1,531	11	$747
Subtotal	2,625	1,242,105	3,360	250,030	3,371	250,777	11	747

Bureau of the Census: Periodic censuses and programs	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Sample redesign	46	1,887	84	4,728	84	4,728		
Geographic support	218	8,504	161	8,294	161	8,294		
Data processing systems		36,296		22,552		22,552		
TOTAL DIRECT OBLIGATIONS:	3,544	1,314,836	4,166	315,357	4,177	316,104	11	747
TOTAL BUDGET AUTHORITY:	3,544	1,314,836			4,177	316,104		
TOTAL APPROPRIATION:	3,544	1,314,836			4,177	316,104		

Summary of Changes from 1989 Appropriation

Bureau of the Census: Periodic censuses and programs	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			3,560	$1,322,967
Reduction pursuant to P.L. 99-177			(16)	(8,131)
Appropriation currently available, 1990			3,544	1,314,836
Planned cyclical changes in periodic censuses			622	(1,011,198)
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$7,044		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				7,044
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		5,034		
Less amount absorbed in FY 1991		(2,517)		
Subtotal, adjustment for 1991 pay increase				2,517
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		210		
Less amount absorbed in 1991		(105)		
				105
OTHER COST CHANGES:				
Salaries and benefits:				
Employees' compensation fund		53		
Other objects:				
Management savings (A-76)		300		
Other increases and decreases				
Updating cyclic requirements		1,700		
Subtotal, other cost changes				2,053
TOTAL, adjustments to base:				11,719
1991 base			4,166	315,357
Program changes			11	747
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			4,177	316,104
TOTAL 1991 APPROPRIATION:			4,177	316,104

ECONOMIC AFFAIRS
ECONOMIC AND STATISTICAL ANALYSIS

Economic and Statistical Analysis provides a clear picture of the U.S. economy, economic information and analyses and supports economic policy. This is accomplished through two program activities:

- Economic Analysis. Prepares and interprets the economic accounts of the U.S., consisting of the national income and product accounts, summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace interrelationships among industrial markets; regional economic accounts; and the U.S. balance of payments and associated foreign investment accounts. This work is supplemented by the preparation and analysis of econometric models and a system of business indicators.

- Policy Support. Provides information and analyses on the state of the economy and matters relating to economic policy, supports the Under Secretary for Economic Affairs with statistical coordination and conducts analyses of the cross-industry effects of economic developments.

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	$32,899	$30,908	$39,948	$9,040
TOTAL APPROPRIATION:	$32,899	$30,908	$39,948	$9,040

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	431	531	627	+96

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Economic Analysis (ESA-22)	454	$27,266	+96	+$6,995

Increases are provided to maintain the quality of the GNP estimates and to modernize and extend the U.S. national economic accounts (+50 pos.; +$3,552); and to maintain the quality of the balance of payments estimates and improve international investment data (+46 pos.; +$3,443). These funds will be used to implement the principle recommendations of the Economic Policy Council's Working Group on Improving Economic Statistics (Boskin Report).

Comparison of Appropriation by Activity

Economic and Statistical Analysis Salaries and expenses	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBL.GATIONS:								
Economic analysis								
National economic accounts	154	$9,555	154	$10,166	204	$13,718	50	$3,552
International economic accounts	139	7,190	139	7,673	185	11,116	46	3,443
Regional economic accounts	84	4,122	84	4,381	84	4,381		
Analysis of economic trends	80	4,744	77	5,046	77	5,046		
Subtotal	457	25,611	454	27,266	550	34,261	96	6,995
Policy support	74	5,297	77	5,687	77	5,687		
TOTAL DIRECT OBLIGATIONS:	531	30,908	531	32,953	627	39,948	96	6,995
REIMBURSABLE OBLIGATIONS:	56	1,900	56	2,100	56	2,100		
TOTAL OBLIGATIONS:	587	32,808	587	35,053	683	42,048	96	6,995
FINANCING:								
Offsetting collections from:								
Federal funds	(52)	(1,505)			(52)	(1,705)		
Non-Federal sources	(4)	(395)			(4)	(395)		
Subtotal, financing	(56)	(1,900)			(56)	(2,100)		
TOTAL BUDGET AUTHORITY:	531	30,908			627	39,948		
TOTAL APPROPRIATION:	531	30,908			627	39,948		

Summary of Changes from 1990 Appropriation

Economic and Statistical Analysis: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			535	$31,150
Reduction pursuant to P.L. 99-177			(4)	(242)
Appropriation currently available, 1990			531	30,908
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full year cost		$767		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				767
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		622		
Less amount absorbed in FY 1991		(311)		
Subtotal, adjustment for 1991 pay increase				311
ADJUSTMENT FOR 1991 SES INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		366		
Less amount absorbed in FY 1991		(183)		
Subtotal, adjustment for 1991 pay increase				183
OTHER COST CHANGES:				
Salaries and benefits:				
Accountants Pay		28		
FERS basic benefits and Thrift Plan		135		
Civil Service Retirement System		(62)		
Federal Insurance Contributions Act (FICA)		64		
Health insurance premium		123		
Employees' compensation fund		(7)		
Extra compensable day		84		
Other objects:				
Rental payments to GSA		123		
Federal Telecommunications System		(45)		
Printing and reproduction		44		
Working Capital Fund		314		
Supplies and materials		13		
Management savings		(10)		
Subtotal, other cost changes				804
TOTAL, adjustments to base				2,045
1991 base			531	32,953
Program changes			96	6,995
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			627	39,948
TOTAL 1991 APPROPRIATION:			627	39,948

INTERNATIONAL TRADE ADMINISTRATION

The International Trade Administration strives to increase the competitiveness of U.S. business in the world economy by promoting U.S. exports, fighting unfair foreign trade barriers, and negotiating and implementing both multilateral and bilateral trade agreements. This is accomplished through four programs:

- Trade development assesses the competitiveness of U.S. industries, conducts analyses on international trade and investment, and conducts export promotion programs directed toward specific industrial sectors.
- International economic policy assists in formulation of U.S. bilateral and multilateral trade policies, monitors the implementation of trade agreements, and assists U.S. businesses seeking to trade with specific countries.
- Import administration protects American firms from unfair trade practices by administering U.S. antidumping and countervailing duty laws, bilateral steel trade agreements, the U.S.-Canada Softwood Lumber Agreement, and the U.S.-Japan Semiconductor Agreement.
- The United States and Foreign Commercial Service provides exporting advice and export promotion services to U.S. firms through a network of offices covering 43 states and 66 foreign countries. The US&FCS develops and distributes information products and conducts trade shows and trade fairs overseas.

Summary

Appropriation

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation: Operations and admin.	$167,502	$178,859	$189,020	+$10,161
TOTAL APPROPRIATION:	167,502	178,859	189,020	+10,161

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation: Operations and admin.	2,021	2,446	2,577	+131

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Trade development (ITA-31)	551	$42,013	-15	-$4,727

The Administration proposes to eliminate the Trade Adjustment Assistance Program because it has not been effective in assisting U.S. firms to adjust to import competition (-11 pos.; -$4,543). Additional resources are provided to develop software to transmit data to the National Trade Data Bank (NTDB) and facilitate access to the NTDB by U.S. trade officials (+1 pos.; +$130). A decrease in Sectoral Analysis and Trade and Information Analysis reflects completion of the GATT's Uruguay Round (-5 pos.; -$314).

International economic policy (ITA-55)	267	18,000	-10	-327

Regional Economic Policy needs additional resources to help U.S. firms take advantage of the European Community's establishment of a single internal market (+$154) and economic reforms in East Europe and the USSR (+$100). A decrease in Management and Policy Coordination and Regional Economic Policy reflects completion of the GATT's Uruguay Round (-10 pos.; -$541). Due to lower than expected costs, Regional Economic Policy also proposes a decrease for funding of general dispute settlement panels for the U.S.-Canada Free Trade Agreement (-$40).

Import administration (ITA-81)	342	21,628	+50	+2,793

Additional resources are needed to process an increasing number of reviews of antidumping (AD)/countervailing duty (CVD) cases (+24 pos.; +$1,287). An increase is proposed to implement changes to AD and CVD laws provided by the 1988 Trade Act (+15 pos.; +$900). Resources are needed to achieve an international consensus on steel trade practices and meet shorter deadlines for processing requests to import steel due to short supply (+8 pos; $484). A decrease in Import Administration reflects completion of the GATT's Uruguay Round (-1 pos.; -$38). Additional resources are needed to process an increasing number of Foreign Trade Zone applications (+4 pos.; +$160).

U.S. and Foreign Commercial Service (ITA-115)	1,286	99,515	+106	+10,125

Foreign Operations needs additional funds to expand its commercial staff in key overseas markets for such activities as ensuring the U.S. exporters are able to take advantage of the European Community's establishment of a single internal market and opportunities provided by the U.S.-Canada Free Trade Agreement, promoting exports to Japan and other Pacific rim countries, and improving intellectual property rights protection (+107 pos.; +$7,912). Additional resources all also needed to provide adequate security for overseas commercial officers (+850). A decrease in Foreign Operations reflects completion of the GATT's Uruguay Round (-1 pos.; -$57). Export Promotion Services needs additional resources to ensure that its Commercial Information Management System (CIMS) can adequately fulfill its role as the basis for the Export Promotion Data System of the NTDB (+$850). Domestic Operations needs additional funds to more effectively allocate its district office staff (+$570).

Comparison of Appropriation by Activity

International Trade Administration: Operations and administration	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Trade development	551	$49,000	551	$42,013	536	$37,286	(15)	($4,727)
International economic policy	267	17,630	267	18,000	257	17,673	(10)	(327)
Import administration	342	21,166	342	21,628	392	24,421	50	2,793
U.S. & Foreign Commercial Service	1,286	98,273	1,286	99,515	1,392	109,640	106	10,125
TOTAL DIRECT OBLIGATIONS:	2,446	186,069	2,446	181,156	2,577	189,020	131	7,864
REIMBURSABLE OBLIGATIONS:	30	18,122	30	17,000	30	17,000		
TOTAL OBLIGATIONS:	2,476	204,191	2,476	198,156	2,607	206,020	131	7,864
FINANCING:								
Offsetting collections from:								
Federal funds	(1)	(2,995)			(1)	(2,400)		
Non-Federal sources	(29)	(15,350)			(29)	(14,600)		
Receipts unavailable pursuant to P.L. 99-177		223						
Unobligated balance available, start of year		(7,210)						
Subtotal, financing	(30)	(25,332)			(30)	(17,000)		
TOTAL BUDGET AUTHORITY:	2,446	178,859			2,577	189,020		
TOTAL APPROPRIATION:	2,446	178,859			2,577	189,020		

Summary of Changes from 1990 Appropriation

International Trade Administration: Operations and administration	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			2,446	$181,296
Reduction pursuant to P.L. 99-177				(2,437)
Appropriation currently available, 1990			2,446	178,859
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$2,943		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				2,943
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		2,384		
Less amount absorbed in FY 1991		(1,192)		
Subtotal, adjustment for 1991 pay increase				1,192
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		796		
Less amount absorbed in FY 1991		(398)		
Subtotal, adjustment for 1991 pay increase				398
OTHER COST CHANGES:				
Salaries and benefits:				
Employees' Compensation Fund		148		
Foreign nationals' wage increase		1,330		
Extra compensable day		387		
FERS basic benefits and Thrift Plan		147		
Civil Service Retirement System		(69)		
Federal Insurance Contributions Act (FICA)		114		
Health insurance premium		592		
Other objects:				
Rent payments to GSA		499		
Overseas price increases		961		
Federal Telecommunications System		(379)		
Printing and reproduction		123		
Premium utility services		103		
Working Capital Fund		167		
National communications system		1		
Subtotal, other cost changes				4,124
NON-RECURRING PROGRAM CHANGES:				
Grant to Tailored Clothing Technology Corporation		(3,360)		
Grant for New Materials Center		(3,000)		
Subtotal, non-recurring program changes				(6,360)
TOTAL, adjustments to base:				2,297
1991 base			2,446	181,156
Program changes			131	7,864
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			2,577	189,020
TOTAL 1991 APPROPRIATION:			2,577	189,020

BUREAU OF EXPORT ADMINISTRATION

The Bureau of Export Administration (BXA) enforces U.S. export controls relating to national security, foreign policy, and short supply. Drawing its authority from the Export Administration Act of 1979 as amended (EAA), BXA strives to balance economic and national security interests. BXA performs four main activities:

- Management and policy coordination develops, analyzes, and coordinates policy initiatives within the BXA.
- Export Administration is responsible for: 1) determining whether to approve or deny licenses to export goods and technical data controlled for reasons of national security, foreign policy, or short supply; 2) determining the technical parameters of goods and technology subject to control, drafting regulations, and representing BXA in numerous interagency and international fora concerned with export controls; and 3) determining whether controlled goods or technology are available overseas.
- Export Enforcement seeks to prevent and detect illegal exports of controlled goods or technology, and prosecutes firms accused of violating U.S. export control laws.
- Industrial Resource Administration under the authority of the Defense Production Act of 1950, as amended, is responsible for: 1) identifying bottlenecks in industrial production which would be critical in a national security crisis; 2) participating in the management of the National Defense Stockpile; 3) investigating whether imports of particular goods threaten U.S. national security, 4) analyzing the effects on the U.S. industrial base of Defense Department Memoranda of Understanding (MOUs) regarding defense trade with other defense ministries, and 5) analyzing the effect on U.S. national security of foreign investment in defense-related industries.

SUMMARY

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Operations and admin.	$40,106	$41,416	$44,373	$2,957
TOTAL APPROPRIATION:	40,106	41,416	44,373	2,957

Permanent Positions

Appropriation:	1989	1990	1991 Estimate	Increase (Decrease)
Operations and admin.	475	565	594	29

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Management and policy coordination (BXA-18)	32	$2,547	0	-$642

BXA proposes a reduction of resources it has previously used to fund studies on export controls and exporter assistance services.

Export administration (BXA-22)	303	23,081	+19	+1,298

BXA needs additional resources to maintain exporter assistance staff in Boston, Portland, and Northern California (+10 pos.; +$410). BXA also needs additional funds to review more frequently the Commodity Control list as required by the 1988 Trade Act, to process in a timely manner an increasing number of requests for commodity classifications, and to undertake reports required by the 1988 Trade Act including reviewing the export control policies of COCOM countries (+9 pos.; +$888).

Industrial resources administration (BXA-42)	28	1,902	+11	+835

BXA needs additional resources to analyze the effects on the U.S. industrial base of Defense Department Memoranda of Understanding (MOUs) regarding defense trade with other Defense ministries and foreign offsets as required by the defense Authorization Act of 1989, and to analyze the effect on U.S. national security of foreign investment in defense-related industries as required by the 1988 Trade Act (+11 pos; +$835).

Comparison of Appropriation by Activity

Bureau of Export Administration: Operations and administration	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Management and policy coordination	32	$2,511	32	$2,635	32	$1,993		($642)
Export administration	304	23,473	303	23,100	322	24,398	19	1,298
Export enforcement	201	15,688	201	15,259	201	15,259		
Industrial resource administration	28	1,954	28	1,888	39	2,723	11	835
TOTAL DIRECT OBLIGATIONS:	565	43,626	564	42,882	594	44,373	30	1,491
REIMBURSABLE OBLIGATIONS:	4	800	4	350	4	350		
TOTAL OBLIGATIONS:	569	44,426	568	43,232	598	44,723	30	1,491
FINANCING:								
Offsetting collections from: Non-Federal sources	(4)	(800)			(4)	(350)		
Unobligated balance available, start of year		(2,210)						
Subtotal, financing	(4)	(3,010)			(4)	(350)		
TOTAL BUDGET AUTHORITY:	565	41,416			594	44,373		
TOTAL APPROPRIATION:	565	41,416			594	44,373		

Summary of Changes from 1990 Appropriation

Bureau of Export Administration: Operations and administration	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			565	$42,000
Reduction pursuant to P.L. 99-177				(584)
Appropriation currently available, 1990			565	41,416
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$820		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				820
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		547		
Less amount absorbed in FY 1991		(274)		
Subtotal, adjustment for 1991 pay increase				273
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		136		
Less amount absorbed in FY 1991		(68)		
Subtotal, adjustment for 1991 pay increase				68

Bureau of Export Administration: Operations and administration	Perm. Pos.	Amount	Perm. Pos.	Amount
OTHER COST CHANGES:				
Salaries and benefits:				
1991 cost of positions financed part year in 1990		100		
Overseas wage increases		2		
FERS basic benefits and Thrift Plan		77		
Civil Service Retirement System		(31)		
Medicare		3		
Federal Insurance Contributions Act (FICA)		33		
Other objects:				
1990 Gramm-Rudman-Hollings Sequester	(16)	(717)		
Phase II of 1990 foreign availability increase	15	765		
Regional Administrative Support Centers		36		
Federal Telecommunications System		(93)		
Overseas price increases		55		
Supplies and materials		17		
Working Capital Fund		58		
Subtotal, other cost changes			(1)	305
TOTAL, adjustments to base:			(1)	1,466
1991 base			564	42,882
Program changes			30	1,491
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			594	44,373
TOTAL 1991 APPROPRIATION:			594	44,373

MINORITY BUSINESS DEVELOPMENT AGENCY

The Minority Business Development Agency (MBDA) coordinates Federal efforts to develop and strengthen new and existing minority business. On a cost-sharing basis, MBDA-funded Minority Business Development Centers (MBDC's) provide technical and management assistance to minority entrepreneurs. MBDA also conducts resource development, advocacy, research and information programs.

To meet the needs of minority businesses in FY 1991, the Administration proposes to revitalize and reinvigorate MBDA through a series of program expansions.

Summary

Appropriation

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation: Minority business development	$39,705	$39,741	$46,161	$6,420
TOTAL APPROPRIATION:	$39,705	$39,741	$46,161	$6,420

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation: Minority business development	188	216	224	8

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Enterprise development (MBDA-21)	135	$34,936	0	+$3,774

Increases are provided to improve the quality of services provided by the Minority Business Development Centers (+$2,874), fund an additional three Indian Business Development Centers (+$510) and implement a rural services program (+$390).

Resource development (MBDA-25)	23	$3,106	+6	+$577

Increases are provided to foster minority ownership of franchises and hire additional staff to identify sources of debt and equity capital and sources of surety bonding for minority businesses (+4 pos.; +$380).

MBDA will reestablish its State and local programs by focusing on forming strategic intergovernmental programs, re-establish the Minority Business Opportunity Committees Program, and provide additional staff assistance to Federal agencies in formulating their annual minority business development plans and to develop and monitor interagency agreements with such agencies as the Department of Transportation, Small Business Administration and the Environmental Protection Agency. (+2 pos.; +$197).

Advocacy, research and information (MBDA-39)	30	$2,507	+2	+$1,261

Additional resources are requested to establish the Minority Business Development Advisory Council (+$75) and increase awareness of MBDA programs by updating and distributing MBDA brochures and conducting workshops and seminars on MBDA programs (+$25).

Additional resources are provided to increase information available to minority businesses by linking Business Development Centers with on-line business information systems (+$500) and establish a Minority Business Enterprise Information Center, an enhanced version of the Information Clearinghouse, which will be responsible for disseminating pamphlets, brochures, fact sheets and other information about minority-owned businesses (+2 pos.; +$146).

An increase is also requested to enhance research activities by conducting policy analysis and formulation activities and program impact evaluation studies. This will enable MBDA to accurately assess the program needs of minority-owned businesses (+$515).

Comparison of Appropriation by Activity

Minority Business Development Agency: Minority business development	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Enterprise development	155	$36,331	155	$34,936	155	$38,710		$3,774
Resource development	27	5,485	27	3,106	33	3,683	6	577
Advocacy, research & information	34	2,634	34	2,507	36	3,768	2	1,261
TOTAL DIRECT OBLIGATIONS:	216	44,450	216	40,549	224	46,161	8	5,612
REIMBURSABLE OBLIGATIONS:		600		600		600		
TOTAL OBLIGATIONS:	216	45,050	216	41,149	224	46,761	8	5,612
FINANCING:								
Offsetting collections from: Federal funds		(600)				(600)		
Unobligated balance available, start of year		(4,709)						
Subtotal, financing		(5,309)				(600)		
TOTAL BUDGET AUTHORITY:	216	39,741			224	46,161		
TOTAL APPROPRIATION:	216	39,741			224	46,161		

Summary of Changes from 1990 Appropriation

Minority Business Development Agency: Minority Business Development	Perm. Pos.	Amount	Perm. Pos	Amount
Appropriation currently available, 1990			216	$39,741
ADJUSTMENTS TO BASE:				
ADJUSTMENTS FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$348		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay raise				348
ADJUSTMENTS FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		245		
Less amount absorbed in FY 1991		(122)		
Subtotal, adjustment for 1991 pay raise				123
ADJUSTMENTS FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		85		
Less amount absorbed in FY 1991		(43)		
Subtotal, adjustment for 1991 pay raise				42

Minority Business Development Agency: Minority Business Development	Perm. Pos.	Amount	Perm. Pos	Amount
OTHER COST CHANGES:				
Salaries and Benefits:				
Extra compensable day		33		
Civil Service Retirement System		(9)		
FERS basic benefits and Thrift Plan		20		
Federal Insurance Contribution Act (FICA)		10		
Health insurance premium		113		
Employees' Compensation Fund		11		
Other objects;				
Transportation of persons		6		
Rent payments to GSA		63		
Federal Telecommunications System		(69)		
Printing and reproduction		14		
Working Capital Fund		89		
Other services		11		
Supplies		3		
Subtotal, other cost changes				295
TOTAL, adjustments to base:				808
1991 base			216	40,549
Program changes			8	5,612
TOTAL DIRECT OBLIGATIONS:			224	46,161
TOTAL 1991 APPROPRIATION:			224	46,161

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION

The United States Travel and Tourism Administration (USTTA) coordinates the Federal role in international tourism. USTTA plans, develops, and carries out an international tourism marketing program designed to stimulate and encourage travel to the U.S. The Administration proposes that USTTA be funded by direct appropriations beginning in FY 1991. The Administration will separately pursue a travel promotion fee for FY 1991 intended to offset the cost of USTTA by assessing a fee on those who benefit from federal travel promotion progams.

Summary

Appropriation

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Salaries and expenses	$13,800	$14,122	$14,362	$240
TOTAL APPROPRIATION:	$13,800	$14,122	$14,362	$240

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses:	85	91	91	0

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Tourism export development (USTTA-25)	76	$12,711	0	-$411

Lower-priority programs in research, marketing, and cooperative advertising will be reduced (-$411).

Comparison of Appropriation by Activity

U.S. Travel and Tourism Administration: Salaries and expenses	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Tourism export development	76	$12,201	76	$12,711	76	$12,300		($411)
Executive direction	15	1,921	15	2,062	15	2,062		
TOTAL DIRECT OBLIGATIONS:	91	14,122	91	14,773	91	14,362		(411)
REIMBURSABLE OBLIGATIONS:		1,480		1,500		1,500		
TOTAL OBLIGATIONS:	91	15,602	91	16,273	91	15,862		(411)
FINANCING:								
Offsetting collections from:								
Federal funds		(50)				(50)		
Non-Federal sources		(1,430)				(1,450)		
Subtotal, financing		(1,480)				(1,500)		
TOTAL BUDGET AUTHORITY:	91	14,122			91	14,362		
TOTAL APPROPRIATION:	91	14,122			91	14,362		

Summary of Changes from 1990 Appropriation

U.S. Travel and Tourism Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			91	$14,300
Reduction pursuant to P.L. 99-177				(178)
Appropriation currently available, 1990			91	14,122
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in 1991 to provide full-year cost		$122		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				122
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		86		
Less amount absorbed in FY 1991		(43)		
Subtotal, adjustment for 1991 pay increase				43
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COST:				
Cost in FY 1991 of SES pay increase		68		
Less amount absorbed in FY 1991		(34)		
Subtotal, adjustment for 1991 pay increase				34

U.S. Travel and Tourism Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
OTHER COST CHANGES				
Salaries and Benefits:				
Extra compensable day		17		
Civil Service Retirement System		(13)		
FERS basic benefits and Thrift Plan		29		
Federal Insurance Contribution Act (FICA)		13		
Health insurance premium		26		
Employees' Compensation Fund		2		
Other objects:				
Rent payments to GSA		15		
Communications, utilities and miscellaneous charges		7		
Federal Telecommunications Systems		(15)		
Printing and reproduction		44		
Working Capital Fund		28		
Other services		(5)		
Supplies		5		
Overseas wage and price increases		299		
Subtotal, other cost changes				452
TOTAL, adjustments to base:			91	651
1991 base			91	14,773
Program changes				(411)
TOTAL DIRECT OBLIGATIONS:			91	14,362
TOTAL 1991 APPROPRIATION:			91	14,362

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOAA's basic programs are grouped into six areas: National Ocean Service; National Marine Fisheries Service; Oceanic and Atmospheric Research; National Weather Service; National Environmental Satellite, Data, and Information Service; and Program Support. In addition, NOAA is responsible for managing a number of fishery program-related accounts.

The National Ocean Service provides for the management of ocean and coastal resources, particularly in the 200-mile Exclusive Economic Zone, and for improvements in quality, quantity, geographic distribution and timeliness of ocean observations. Mapping and charting activities produce aeronautical and nautical charts and supporting documents which are compiled and sold to the public and other Federal agencies. The coastal zone management program emphasizes national coastal priorities through financial and technical assistance to states. NOAA also acquires and manages marine and estuarine sanctuaries of national significance.

The National Marine Fisheries Service is responsible for management of the fisheries within the 200-mile Exclusive Economic Zone to ensure that fishery stocks continue as a renewable resource. Fishery stocks are surveyed, catch data are collected, and research is conducted to understand better the variables affecting the abundance and variety of the resource. Protection of endangered marine species and enforcement of the laws and regulations regarding a variety of marine resources are also primary activities. Research is also conducted on interjurisdictional and anadromous fishery resources.

Oceanic and Atmospheric Research programs provide the understanding and technique development necessary to improve NOAA services (weather warnings and forecasts, solar-terrestrial services, climate predictions, and marine services) and the understanding for national policy formulation (e.g., global change, acid precipitation, rural ozone, and antarctic ozone hole). Research also is conducted on a wide range of ocean and Great Lakes topics such as the interaction of oceans and atmosphere, and the concentration and disposition of pollutants.

The National Weather Service provides weather and flood warnings and forecasts to the general public and other users. Staffed and automated stations on land and at sea and weather satellites gather meteorological observations of the atmosphere and the earth's surface. Based on these observations, a professional meteorological staff prepares warnings and forecasts and disseminates them to the public.

The National Environmental Satellite, Data, and Information Service provides for procurement and operation of the polar and geostationary weather satellites, production and launch of the LANDSAT-6 satellite, and management of NOAA's environmental data collections. The weather satellites provide meteorological data to the Weather Service.

Environmental data and information is collected from NOAA and other sources, disseminated, and archived for future use.

Program Support maintains and operates the fleet of NOAA ships and the research aircraft. Also included are executive direction, general administration, and the Regional Administrative Support Centers.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation: Operations, research, and facilities	$1,240,052	$1,214,607	$1,316,064	$101,457
Fishing vessel and gear damage contingency fund	0	1,000	1,202	202
Fishermen's contingency fund	719	734	1,000	266
Foreign fishing observer fund	1,642	1,963	1,997	34
TOTAL APPROPRIATION:	1,242,413	1,218,304	1,320,263	101,959
TRANSFERS:				
Operations, research, and facilities from "Promote and develop... fishery products"	45,600	55,000	61,900	6,900
Operations, research, and facilities from from coastal energy impact fund	0	4,500	8,000	3,500
Coastal energy impact fund	0	(4,500)	(8,000)	(3,500)
Fisheries promotional fund from "Promote and develop... American fisheries"	3,000	2,000	0	(2,000)

	1989	1990	1991 Estimate	Increase (Decrease)
"Promote and develop... American fisheries"	5,088	4,935	0	(4,935)
Subtotal, transfers	53,688	61,935	61,900	(35)
BORROWING AUTHORITY:				
Federal ship financing fund	0	10,000	5,400	(4,600)
TOTAL BUDGET AUTHORITY: (Federal Funds)	1,296,101	1,290,239	1,387,563	97,324
TRUST FUNDS:				
Aviation weather trust fund	28,717	29,583	34,521	4,938
PROPOSED FOR LATER TRANSMITTAL:				
Operations, research, and facilities	0	0	[(45,481)]	[(45,481)]
Marine waterways trust fund	0	0	[45,481]	[45,481]
TOTAL BUDGET AUTHORITY: (All Funds)	1,324,818	1,319,822	1,422,084	102,262

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Operations, research, and facilities	10,054	10,034	9,949	(85)
Fishing vessel and gear damage contingency fund	3	3	3	0

	1989	1990	1991 Estimate	Increase (Decrease)
Fishermen's contingency fund	1	1	1	0
Foreign fishing observer fund	5	15	15	0
Fisheries promotional fund	3	3	0	(3)
"Promote and develop... American fisheries"	0	11	0	(11)
Federal ship financing fund	21	21	21	0
LATER TRANSMITTAL PROPOSAL:				
Operations, research, and facilities	0	0	[(752)]	[(752)]
Marine waterway trust fund	0	0	0	0
TOTAL:	10,087	10,088	9,989	(99)

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Amount
National Ocean Service				
Mapping, charting, and geodesy	511	$49,447	0	-$2,513

Decreases are requested for state-specific projects including multipurpose mapping (-$577), multipurpose cadastre (-$1,836) and the Great Lakes mapping program (-$100).

The Administration will submit legislation to be transmitted later to augment the Harbor Maintenance Trust Fund and create the Marine Waterways Trust Fund. Certain receipts from this Fund will be used to fund NOAA marine related programs. This will not reduce NOAA program activities, but will change the method of funding.

In the legislation to be transmitted, nautical mapping and coastal charting (-200 pos.; -$13,685) will be funded through the Marine Waterways Trust Fund.

Observation and assessment	332	42,444	-3	+8,974

An increase is requested to expand an integrated NOAA program in coastal ocean science to improve scientific information for decisions related to coastal problems (+1 pos.; +$11,000). Funds are requested to expand the ocean services program (+$1,425). Of this amount an increase (+$2,300) is requested to expand core services which provide centralized collection, analysis, and distribution of real-time ocean data, and a decrease (-$875) is requested to terminate State-specific projects. Decreases are requested for circulatory surveys (-3 pos.; -$400), State-specific ocean assessment activities (-1 pos.; -$1,000), Tampa Bay mapping project (-$1,000), the wetlands demonstration project (-$900) and two observation buoys (-$151).

In the legislation to be transmitted, the tides and circulation programs (-190 pos.; -$6,836) will be funded through the Marine Waterways Trust Fund.

Ocean and coastal management	80	45,894	0	-4,700

An increase for the marine sanctuary program will provide a $3.5 million program (+$200). Grants emphasizing national coastal priorities for the coastal zone management program will be funded at $30 million (-$4,400) and program management at $2.8 million (-$500).

National Marine Fisheries Service

Information collection and analyses	1,280	106,613	+15	-8,325

Increases are requested for the following: PACFIN (+$1,000), fisheries statistics (+6 pos.; +$2,000), Bering Sea pollack (+21 pos.; +$750), conservation engineering (+8 pos.; +$750), Alaska groundfish survey (+2 pos.; +$700) and marine mammal population assessments (+$3,000). An increase is requested to lease three information systems as part of an overall ADP upgrade for improving management and supporting research activities (+$1,700).

Reduced funding is requested for: protected species research (-$649); Atlantic salmon research (-$500); oyster disease research (-$500), and stock enhancement (-22 pos.; -$4,287). Consolidation of field operations is proposed (-$4,000). No funding is requested for the following projects/programs: Chesapeake Bay studies (-$1,600), right whale research (-$235), Alaska salmon enhancement (-$3,766), sub-Arctic bottom-fish (-$753), Hawaii stock management (-$400), Yukon chinook study (-$235), and Antarctic research (-$1,300).

Conservation and management operations	474	58,483	0	-9,507

An increase is provided for implementation of the 1987 Driftnet Act (+$300). Columbia River hatcheries support (-$9,300) is to be assumed by Bonneville Power Administration customers. Reduced funding is requested for Georges Bank management studies (-$471), and harbor seals and sea lions studies (-$36).

State and industry assistance programs	207	18,909	-86	-13,015

Reduced funding is requested for product quality research (-86 pos.; -$4,400). No funding is requested for grants for interjurisdictional fisheries (-$3,500), anadromous fish (-$2,354), striped bass (-$471), and interstate fishery commissions (-$330) or add-ons for model seafood inspection (-$330), fish oil development (-$942), mahi mahi export strategy (-$188), and shellfish water standards (-$500).

Oceanic and Atmospheric Research

Climate and air quality research	281	54,299	+31	+64,373

An increase is requested to expand the Climate and Global Change program as part of a major government-wide effort to monitor, understand, and predict global change (+40 pos.; +$69,000). Reduced funding is requested for National Acid Precipitation Assessment Program (NAPAP) (-$1,487). No funding is requested for the National Climate Program Office (-9 pos.; -$1,090), regional climate centers (-$1,800), and international climate panel support (-$250).

Atmospheric programs	371	44,395	+10	-2,596

An increase is requested to improve space environment measurement and forecasting (+10 pos.; +$1,500). Reduced funding is requested for the Program for Regional Observing and Forecasting Services (PROFS) (-$1,883). No funding is requested for State-specific weather modification efforts (-$2,213).

Ocean and Great Lakes programs	221	72,993	-10	-33,963

Funding is requested to continue the Sea Grant College Program except for Marine Advisory Service agents (-$13,300). Reduced funding is requested for the Great Lakes Environmental Research Laboratory (GLERL) (-$1,600). No funds are requested for the southeast Fisheries Oceanography Coordinated Investigations (-$942), the National Coastal Resources Research and Development Institute (-$1,177), the U.S./Asia aquaculture science exchange program (-$282), the Key Largo Tropical research facility (-$377), the National Undersea Research Program (-9 pos.; -$14,285), and the VENTS program (-1 pos.; -$2,000).

National Weather Service

Operations and research	3,334	289,831	-71	+2,725

The request provides funding to maintain existing service levels at weather field offices. Funds are requested for the Modernization and Associated Restructuring Demonstration and Implementation program to prepare for the multi-site operational demonstration in 1993 (+38 pos.; +$11,000).

Decreases are proposed as follows: reduce staff at eight Weather Service Forecast Offices (WSFOs) (-35 pos.; -$787); reconfigure the four-region management structure into a three-region structure (-18 pos.; -$852); reduce data buoy test and engineering activities (-$540); discontinue maintenance of four moored data buoys surrounding Hawaii (-$565); consolidate the Pacific and Alaska headquarters (-11 pos.; -$383); eliminate the agricultural weather and fruit frost programs (-37 pos.; -$2,424); reduce the fire weather program (-8 pos.; -$470); eliminate unnecessary funding for Susquehanna River Basin flood warning system (-$700) and the Colorado River flood warning system (-$300); cancel three mountain weather observatory contracts (-$200); and extend equipment maintenance schedule (-$1,054).

In legislation to be transmitted, marine weather services (-90 pos.; -$5,301) will be funded through the Marine Waterways Trust Fund.

Systems acquisition	39	100,941	0	+76,526

Continue the production and installation of Next Generation Weather Radar (NEXRAD) units (+$43,284). Proceed with the full-scale production phase of the Automated Surface Observing Systems (ASOS) program (+$5,375). Continue development of the Advanced Weather Interactive Processing System (AWIPS) and NOAA-Port (+$28,367). Reduce maintenance funding for the National Meteorological Center Class 7 computer (-$500).

National Environmental Satellite, Data, and Information Service

Satellite observing systems/data management	850	265,060	0	+15,370

The request includes increases for the polar-orbiting system (+$49,472) and decreases for the geostationary system (-$26,202). These changes are due primarily to year-to-year variance in the costs of launches, spacecraft and ground system procurement costs. Increased funding is requested for the launch of the LANDSAT-6 Spacecraft (+$1,600). Operations support for LANDSAT-4 and LANDSAT-5 (-$9,500) will cease as a result of the anticipated demise of the satellites in FY 1990.

Program Support

Administration and services	1,217	67,275	0	+200

Increased procurement support is provided for major NWS and NESDIS projects.

Facilities	0	3,204	+1	+3,473

Funding is requested to initiate major maintenance projects at NOAA facilities nationwide (+1 pos; +$2,750) and provide for the purchase of office furniture and furnishings to support the Silver Spring relocation/consolidation project (+$2,723). Reduced funding is requested for Woods Hole fisheries laboratory maintenance (-$2,000).

Marine services	750	60,120	+22	+5,728

Funding is requested to initiate a modernization and upgrade program for the NOAA fleet (+$4,000) and reactivate the NOAA ship DAVIDSON (+25 pos.; +$2,010). No funding is requested for the Southeast Marine Center (-3 pos.; -$282)

In legislation to be transmitted, operations for the mapping and charting ships in the NOAA fleet (-272 pos.; -$19,659) will be funded through the Marine Waterways Trust Fund.

Aircraft services	93	7,440	0	+1,866

Funding is requested to replace the navigation systems on NOAA's two WP-3D research aircraft and provide adequate support for catastrophic system failures, flight training, and aircraft maintenance of air navigation instrumentation.

Other Appropriation Accounts

Fisheries promotional fund	3	2,000	-3	-2,000

Authorization for the Fisheries Promotional Fund expires at the end of FY 1990 and the Fund is proposed to be terminated in FY 1991.

Promote and develop... American fisheries	11	4,935	-11	-4,935

Balances in the fund are proposed to offset marine fishery resource programs in the "Operations, research, and facilities" appropriation in FY 1991.

Proposed for Later Transmittal

Marine waterways trust fund	0	0	0	[+45,481]

A legislative proposal will be submitted to the Congress to increase the ad valorem user fee supporting the Harbor Maintenance Trust Fund, administered by the U.S. Army Corps of Engineers and to establish a Marine Waterways Trust Fund within NOAA. Funds would be transferred from the Harbor Maintenance Trust Fund into the Marine Waterways Trust Fund, similar to the current Airport and Airways Trust Fund - Aviation Weather Trust Fund transfer. Resources transferred would be used to offset the costs of marine weather forecasts, tide and circulation estimates, and mapping and charting activities conducted in the Operations, Research, and Facilities appropriation. This proposal is consistent with the President's policy that the primary beneficiaries of a Federal service should pay for the service.

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Operations, research, and facilities	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
National Ocean Service:								
Mapping, charting & geodesy	511	$47,887	511	$49,447	511	$46,934		($2,513)
(Proposed for later transmittal)					[(200)]	[(13,685)]	[(200)]	[(13,685)]
Observations & assessment	332	41,911	332	42,444	329	51,418	(3)	8,974
(Proposed for later transmittal)					[(190)]	[(6,836)]	[(190)]	[(6,836)]
Ocean & coastal management	80	50,802	80	45,894	80	41,194		(4,700)
Subtotal	923	140,600	923	137,785	920	139,546	(3)	1,761
National Marine Fisheries Service:								
Info. collection & analysis	1,277	114,857	1,280	106,613	1,295	98,288	15	(8,325)
Conservation & mngt. oper.	474	61,454	474	58,483	474	48,976		(9,507)
State & industry assistance	196	21,025	207	18,909	121	5,894	(86)	(13,015)
Subtotal	1,947	197,336	1,961	184,005	1,890	153,158	(71)	(30,847)
Oceanic and Atmospheric Research:								
Climate & air quality	281	54,163	281	54,299	312	118,672	31	64,373
Atmospheric programs	371	43,819	371	44,395	381	41,799	10	(2,596)
Ocean & Great Lakes programs	221	75,166	221	72,993	211	39,030	(10)	(33,963)
Subtotal	873	173,148	873	171,687	904	199,501	31	27,814
National Weather Service:								
Operations and research	3,334	297,962	3,334	289,831	3,263	292,556	(71)	2,725
(Proposed for later transmittal)					[(90)]	[(5,301)]	[(90)]	[(5,301)]
Systems acquisition	39	147,316	39	100,941	39	177,467		76,526
Subtotal	3,373	445,278	3,373	390,772	3,302	470,023	(71)	79,251

National Oceanic and Atmospheric Administration: Operations, research, and facilities	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
National Environmental Satellite, Data and Information Service:								
Satellite observing systems	486	242,998	478	242,886	478	258,256		15,370
Environmental data management	372	21,536	372	22,174	372	22,174		
Subtotal	858	264,534	850	265,060	850	280,430		15,370
Program Support:								
Administration & services	1,217	65,591	1,217	67,275	1,217	67,475		200
Facilities		3,816		3,204	1	6,677	1	3,473
Marine services	750	60,038	750	60,120	772	65,848	22	5,728
(Proposed for later transmittal)					[(272)]	[(19,659)]	[(272)]	[(19,659)]
Aircraft services	93	7,581	93	7,440	93	9,306		1,866
Subtotal	2,060	137,026	2,060	138,039	2,083	149,306	23	11,267
TOTAL DIRECT OBLIGATIONS:	10,034	1,357,922	10,040	1,287,348	9,949	1,391,964	(91)	104,616
REIMBURSABLE OBLIGATIONS:	1,355	310,346	1,355	310,346	1,355	295,424		(14,922)
(Proposed for later transmittal)					[752]	[45,481]	[752]	[45,481]
TOTAL OBLIGATIONS:	11,389	1,668,268	11,395	1,597,694	11,304	1,687,388	(91)	89,694
FINANCING:								
Unobligated balance, start of year		(77,815)						
Recoveries of prior year obligations		(6,000)				(6,000)		
Offsetting collections from:								
Federal funds	(1,355)	(263,816)			(1,355)	(245,588)		
Receipts unavailable pursuant to P.L. 99-177		160						
Non-Federal sources		(17,107)				(15,315)		
Trust funds		(29,583)				(34,521)		
(Proposed for later transmittal)						[(45,481)]		
Subtotal, financing	(1,355)	(394,161)			(1,355)	(301,424)		
TOTAL BUDGET AUTHORITY:	10,034	1,274,107			9,949	1,385,964		
TRANSFERS:								
From "Promote and develop ... American fisheries"		(55,000)				(61,900)		
From "Coastal energy impact fund"		(4,500)				(8,000)		
Subtotal, transfers		(59,500)				(69,900)		
TOTAL APPROPRIATION:	10,034	1,214,607			9,949	1,316,064		

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Operations, research, and facilities	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1990			10,034	$1,214,607
ADJUSTMENTS TO BASE:				
TRANSFERS and FY 1990 FINANCING:				
From "Promote and develop ... American fisheries"	11	$55,000		
From "Fisheries promotional fund"	3			
From "Coastal energy impact fund"		4,500		
From recoveries of past year obligations		6,000		
To "Aviation weather trust fund"		(5,357)		
Subtotal, transfers and financing			14	60,143
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		14,287		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				14,287
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		12,010		
Less amount absorbed in FY 1991		(6,005)		
Subtotal, adjustment for 1991 pay increase				6,005
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		1,496		
Less amount absorbed in FY 1991		(748)		
Subtotal, adjustment for 1991 pay increase				748
OTHER COST CHANGES:				
Salaries and benefits:				
Extra compensable day		1,468		
Cartographer pay raise		483		
FERS basic benefits and Thrift Plan		544		
Civil Service Retirement System		(247)		
Federal Insurance Contributions Act (FICA)		339		
Health insurance premium		708		
Employees' Compensation Fund		(245)		
Benefits for former personnel		51		
Other objects:				
Transportation of things		35		
Rent payments to GSA		2,657		
Rent payments to others		154		
Communications, utilities & misc. charges		(1,351)		
Printing and reproduction		350		
Other services		212		
Working Capital Fund		150		
Supplies and materials		445		
Management savings (A-76)		(871)		
1991 effects of 1990 Gramm-Rudman-Hollings sequester		(6,079)		
Landsat oversight	(8)			
Subtotal, other cost changes			(8)	(1,197)

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Operations, research, and facilities	Perm. Pos.	Amount	Perm. Pos.	Amount
NON-RECURRING PROGRAM CHANGES:				
Buxton Woods sanctuary		(1,500)		
Alaska whale reimbursement		(170)		
St. Paul Trust Fund		(1,600)		
St. George Trust Fund		(1,100)		
University of New Hampshire marine research		(2,000)		
Maintenance of Beaufort, North Carolina laboratory		(200)		
Marine electronics agenda		(675)		
Subtotal, non-recurring program changes				(7,245)
TOTAL, adjustments to base:			6	72,741
1991 base			10,040	1,287,348
Program changes			(91)	104,616
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			9,949	1,391,964
TRANSFERS and FY 1991 FINANCING:				
Transfer from "Promote and develop ... American fisheries"				(61,900)
Program funded from "Coastal energy impact fund"				(8,000)
Recoveries from past year obligations				(6,000)
Total, transfers and financing				(75,900)
TOTAL 1991 APPROPRIATION:			9,949	1,316,064

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Fisheries promotional fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Fisheries promotional fund	3	$4,732		$2,000				($2,000)
FINANCING:								
Unobligated balance, start of year		(2,732)						
TOTAL BUDGET AUTHORITY:	3	2,000		2,000				(2,000)
TRANSFERS:								
From "Promote and develop ... American fisheries"		(2,000)						
TOTAL APPROPRIATION:	3							

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Fisheries promotional fund	Perm. Pos.	Amount
Appropriation currently available, 1990	3	
Adjustments to base (transfer to "Operations, research, and facilities")	(3)	
TOTAL 1991 APPROPRIATION:		

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Promote and develop fishery products and research pertaining to American fisheries	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	11	$453						
Saltonstall-Kennedy grants		11,058		$4,982		$47		($4,935)
TOTAL DIRECT OBLIGATIONS:	11	11,511		4,982		47		(4,935)
FINANCING:								
Unobligated balance, start of year		(6,623)		(47)		(47)		
Unobligated balance, end of year		47						
Subtotal, financing		(6,576)		(47)		(47)		
TOTAL BUDGET AUTHORITY:	11	4,935		4,935				(4,935)
TRANSFERS:								
From Department of Agriculture		(61,935)				(61,900)		
To "Operations, research, and facilities"		55,000				61,900		
To "Fisheries promotional fund"		2,000						
TOTAL APPROPRIATION:	11							

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Promote and develop fishery products and research pertaining to American fisheries	Perm. Pos.	Amount
Appropriation currently available, 1990	11	
Adjustments to base (transfer to "Operations, research, and facilities")	(11)	
TOTAL 1991 APPROPRIATION:		

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Fishing vessel and gear damage compensation fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	3	$133	3	$138	3	$138		
Payment of claims		954		1,064		1,064		
TOTAL DIRECT OBLIGATIONS:	3	1,087	3	1,202	3	1,202		
FINANCING:								
Unobligated balance, start of year		(87)						
TOTAL APPROPRIATION:	3	1,000			3	1,202		

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Fishing vessel and gear damage compensation fund	Perm. Pos.	Amount
Appropriation currently available, 1990	3	$1,000
Adjustments to base		202
TOTAL 1991 APPROPRIATION:	3	1,202

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Fishermen's contingency fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Administrative expenses	1	$50	1	$54	1	$54		
Payment of claims		684		946		946		
TOTAL DIRECT OBLIGATIONS:	1	734	1	1,000	1	1,000		
FINANCING:								
Unobligated balance, start of year		(8)				(8)		
Unobligated balance, end of year		8				8		
Subtotal, financing								
TOTAL APPROPRIATION:	1	734			1	1,000		

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Fishermen's contingency fund	Perm. Pos.	Amount
Appropriation, 1990	1	$736
Reduction pursuant to P.L. 99-177		(2)
Appropriation currently available, 1990	1	734
Adjustments to base		266
TOTAL 1991 APPROPRIATION:	1	1,000

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Foreign fishing observer fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Foreign fishing observer fund	15	$2,594	15	$1,997	15	$1,997		
FINANCING:								
Unobligated balance, start of year		(631)						
TOTAL APPROPRIATION:	15	1,963			15	1,997		

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Foreign fishing observer fund	Perm. Pos.	Amount
Appropriation, 1990	15	$1,986
Reduction pursuant to P.L 99-177		(23)
Appropriation currently available, 1990	15	1,963
Adjustments to base		34
TOTAL 1991 APPROPRIATION:	15	1,997

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Federal ship financing fund, fishing vessels	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Support services	21	$1,800	21	$1,850	21	$1,850		
Disbursements for loan guarantee claims		19,517		10,100		10,100		
TOTAL DIRECT OBLIGATIONS:	21	21,317	21	11,950	21	11,950		

National Oceanic and Atmospheric Administration: Federal ship financing fund, fishing vessels	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
FINANCING:								
Offsetting collections from:								
Non-Federal sources		(7,420)				(6,550)		
Receipts unavailable pursuant to P.L. 99-177		102						
Unobligated balance, start of year		(3,999)						
Subtotal, financing		(11,317)				(6,550)		
AUTHORITY TO BORROW:	21	10,000			21	5,400		

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Aviation weather trust fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Aviation weather trust fund:		$29,583		$34,521		$34,521		
TOTAL APPROPRIATION:		29,583		34,521		34,521		

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Aviation weather trust fund	Perm. Pos.	Amount
Appropriation, 1990		$30,000
Reduction pursuant to P.L. 99-177		(417)
Appropriation currently available, 1990		29,583
Adjustments to base		4,938
TOTAL 1991 APPROPRIATION:		34,521

PROPOSED FOR LATER TRANSMITTAL

Comparison of Appropriation by Activity

National Oceanic and Atmospheric Administration: Marine waterways trust fund	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Marine waterways trust fund:						[$45,481]		[$45,481]
TOTAL APPROPRIATION:						[45,481]		[45,481]

Summary of Changes from 1990 Appropriation

National Oceanic and Atmospheric Administration: Marine waterways trust fund	Perm. Pos.	Amount
Appropriation currently available, 1990		
Program change		[845,481]
TOTAL 1991 APPROPRIATION:		[45,481]

PATENT AND TRADEMARK OFFICE

The Patent and Trademark Office (PTO) is charged with the mission of administering the patent and trademark laws of the United States. PTO examines patent applications, grants patent protection to qualified inventions and disseminates technological information disclosed in patents. PTO also examines trademark applications and provides Federal registration to owners of qualified trademarks.

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	$276,845	$275,877	$353,647	$77,770
Fee collections	(167,845)	(189,977)	(241,620)	(51,643)
TOTAL APPROPRIATION:	109,000	85,900	112,027	26,127

Permanent Positions

Appropriation:	1989	1990	1991 Estimate	Increase (Decrease)
Salaries and expenses	3,724	3,898	4,765	867

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Patent process (PTO-20)	2,602	$165,680	+590	+$44,817

An increase is provided to continue deployment of the Automated Patent System's (APS) principal capability, classified search and image retrieval, to a second examining group and to begin development of foreign patent search, patent copy sales, and Patent Application Management modules of the system (+$13,659). An increase is provided for additional professional and pre-examination clerical staff to handle the anticipated increase in patent applications from 140,000 cases originally budgeted in 1990 to 177,000 cases received in 1991 and to maintain 18-month patent pendency (+585 pos.; +$26,249).

An increase is requested to process increased interference cases in the Patent Appeals and Interferences Division (+5 pos.; +$268). Funding for patent printing and reproduction provides for the printing of an additional 5,249 patents (101,000 total; +$4,641).

Trademark process (PTO-42)	316	$16,915	+126	+$5,113

All trademark operations are financed through fee collections. In 1991, funds will be used to increase professional and clerical staff to handle the anticipated growth in workload volume stemming from implementation of trademark intent-to-use legislation (+118 pos.; +$3,149). Increased funds are provided to upgrade trademark automation systems by renewing the T-Search system lease and replacing T-Search terminals (+$1,481). An increase is needed to process the growing number of trademark appeals cases (+8 pos.; +$357). Resources are also provided to address additional printing requirements to keep pace with increased examiner production and trademark issuances (+$126).

Information dissemination (PTO-57)	524	45,023	+95	+4,742

A decrease is provided for information dissemination initiatives to reflect in large part the reduced share of APS development costs associated with this activity (-$686). Resources are provided to respond to increased demand and inquiries for PTO services and information (+34 pos.; +$1,721), to support implementation of public search room services (+16 pos.; +$193), to process additional maintenance fees and certificates of corrections workload (+20 pos.; +$685), to improve the integrity of patent search files (+10 pos.; +$243), and to enhance examiner search files by providing additional searching tools and data bases (+15 pos.; +$2,586).

Executive direction (PTO-74)	480	61,292	+32	+10,065

Increases are provided to enable PTO to maintain the four percent sample of patent applications reviewed by the Patent Quality Office (+1 pos.; +$125), for the Office of Personnel staff to keep pace with growing staff levels (+8 pos.; +$729), and to improve management and administrative computer systems (+18 pos.; +$2,856). Resources are also provided to augment workload-driven increases in procurement actions (+4 pos.; +$262) and patent attorney roster application receipts (+1 pos.; +$72). An increase is provided to lease additional space to accomodate growth in PTO operations (+$6,021).

Fee collections (PTO-113)		193,321		+48,099

Patent and trademark fees were increased 10.3 percent for the 1989-1991 fee cycle to reflect changes in the Consumer Price Index from the previous three-year period. PTO projects it will collect $241,420 thousand in patent and trademark fees in 1991. Increased fee collections reflect the growth in patent and trademark applications and the increased fees.

Comparison of Appropriation by Activity

Patent and Trademark Office Salaries and expenses:	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Patent process	2,594	$33,000	2,602	$39,299	3,192	$54,946	590	$15,647
Information dissemination	515	21,216	524	19,794	619	19,794	95	
Executive direction	475	38,034	480	36,296	512	37,287	32	991
TOTAL DIRECT OBLIGATIONS:	3,584	92,250	3,606	95,389	4,323	112,027	717	16,638
REIMBURSABLE OBLIGATIONS:								
Patent process		122,378		126,381		155,551		29,170
Trademark process	314	30,025	316	16,915	442	22,028	126	5,113
Information dissemination		24,169		25,229		29,971		4,742
Executive direction		23,327		24,996		34,070		9,074
TOTAL REIMBURSABLE OBLIGATIONS:	314	199,899	316	193,521	442	241,620	126	48,099
TOTAL OBLIGATIONS:	3,898	292,149	3,922	288,910	4,765	353,647	843	64,737
FINANCING:								
Offsetting collections from:								
Federal funds		(200)				(200)		
Non-Federal sources		(180,032)				(241,420)		
Receipts unavailable pursuant to P.L. 99-177		2,520						
Unobligated balance available, beginning of year		(28,537)						
Subtotal, financing		(206,249)				(241,620)		
TOTAL BUDGET AUTHORITY:	3,898	85,900			4,765	112,027		
TOTAL APPROPRIATION:	3,898	85,900			4,765	112,027		

Summary of Changes from 1990 Appropriation

Patent and Trademark Office Salaries and expenses:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			3,898	$85,900
Fee collections				192,497
Reduction pursuant to P.L. 99-177				(2,520)
Appropriation currently available, 1990				275,877
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$5,543		
Less amount absorbed in FY 1991		(387)		
Subtotal, adjustment for 1990 pay increase				5,156
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		4,670		
Less amount amount absorbed in 1991		(2,335)		
Subtotal, adjustment for 1991 pay increase				2,335

Patent and Trademark Office
Salaries and expenses:

	Perm. Pos.	Amount	Perm. Pos.	Amount
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		1,290		
Less amount absorbed in FY 1991		(645)		
Subtotal, adjustment for 1991 SES pay increase				645
Subtotal, pay increases				8,136
OTHER COST CHANGES:				
Full year cost in 1991 of positions financed for part year in 1990		294		
Employees' Compensation Fund		277		
Health insurance premium		1,102		
Civil Service Retirement System		(483)		
Federal Insurance Contribution Act (FICA)		512		
FERS basic benefits and Thrift Plan		1,048		
Extra compensable day		600		
Other objects:				
Rental payments to GSA		998		
Federal Telecommunications System		(200)		
Printing and reproduction		1,368		
Management savings (A-76)	24	(619)		
Subtotal, other cost changes			24	4,897
TOTAL, adjustments to base			24	13,033
1991 base			3,922	288,910
Program changes			843	64,737
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			4,765	353,647
FEE COLLECTIONS:				(241,620)
TOTAL 1991 APPROPRIATION:			4,765	112,027

TECHNOLOGY ADMINISTRATION

The Technology Administration is the principal organization within the Department of Commerce for the development and promotion of Federal technology policies and programs to increase U.S. commercial and industrial innovation, productivity and growth. This is accomplished through the following program activities:

- Executive Direction. Oversees activities of the Office of the Under Secretary, including support for legal counsel.
- Technology Policy and Commercial Technology Application. Stimulates private sector cooperative research and development, promotes technology transfer, supports private sector productivity improvement efforts, reviews international Science and Technology agreements, and monitors the availability of foreign science and technology information.

In FY 1989, the Technology Administration's activities were funded through the Economic and Statistical Analysis and General Administration accounts.

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	0	$3,875	$4,583	$708
TOTAL APPROPRIATION:	0	3,875	4,583	708

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	0	59	59	0

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Increase/(Decrease) Amount
Technology Administration (TA-6)	59	$4,433	0	+$150

This increase will provide general counsel and support services for the Under Secretary.

Comparison of Appropriation by Activity

Technology Administration: Salaries and expenses	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Executive direction	26	$808	16	$1,079	16	$1,229		$150
Technology policy & commercial technology application	33	3,067	43	3,354	43	3,354		
TOTAL DIRECT OBLIGATIONS:	59	3,875	59	4,433	59	4,583		150
TOTAL OBLIGATIONS:	59	3,875	59	4,433	59	4,583		150
TOTAL BUDGET AUTHORITY:	59	3,875	59	4,433	59	4,583		150

Summary of Changes from 1990 Appropriation

Technology Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			59	$3,900
Reduction pursuant to P.L.99-177				(25)
Appropriation currently available, 1990				3,875
ADJUSTMENTS TO BASE:				
Full-year cost of positions funded in FY 1990				317
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1990 to provide full-year cost		$99		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				99
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		80		
Less amount absorbed in FY 1991		(40)		
Subtotal, adjustment for 1991 pay increase				40

Technology Administration: Salaries and expenses	Perm. Pos.	Amount	Perm. Pos.	Amount
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		40		
Less amount absorbed in FY 1991		(20)		
Subtotal, adjustment for 1991 SES pay increase				20
OTHER COST CHANGES:				
Salaries and benefits:				
Extra compensable day		10		
Civil Service Retirement System		(6)		
FERS basic benefits and Thrift Plan		12		
Federal Insurance Contributions Act (FICA)		7		
Health insurance premium		12		
Employees' Compensation Fund		1		
Other objects:				
Rent payments to GSA		17		
Communications, utilities and misc.		(4)		
Printing and reproduction		2		
Other services		20		
Supplies and materials		2		
Equipment		9		
Subtotal, other cost changes				82
TOTAL, adjustments to base:				558
1991 base			59	4,433
Program changes				150
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			59	4,583
TOTAL 1991 APPROPRIATION:			59	4,583

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

The National Institute of Standards and Technology (NIST) provides a wide range of measurements, services, test methods and data to support U.S. competitiveness in world markets. This is accomplished through scientific research; cooperative efforts with public and private research institutions; technology transfer programs including the Manufacturing Technology Centers and the Advanced Technology Program; and the Malcolm Baldrige National Quality Award. These activities allow NIST to maintain our national standards for measurements; support domestic and international voluntary standards processes; promote technology innovation; support secure and reliable Federal computer systems; and spur advances in applied and developmental research being conducted by U.S. industries.

Summary

Appropriation

	1989	1990	1991 Estimate	Increase (Decrease)
FEDERAL FUNDS:				
Appropriation:				
Scientific and technical research and services	$159,000	$161,845	$198,408	$36,563
TOTAL APPROPRIATION:	159,000	161,845	198,408	36,563
Working capital fund	(1,509)	(539)	(9,772)	(9,233)
Earthquake program	0	2,000	0	(2,000)
TOTAL BUDGET AUTHORITY:	157,491	163,306	188,636	25,330

Permanent Positions

Appropriation:	1989	1990	1991 Estimate	Increase (Decrease)
Scientific and technical research and services	1,489	1,556	1,835	279
Working capital fund	1,269	1,272	1,272	0
TOTAL:	2,758	2,828	3,107	279

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base		Increase/(Decrease)	
	Perm. Positions	Amount	Perm. Positions	Amount
Measurement research and standards	443	$43,139	+78	+$7,630

Increases provide funds for quality assurance for analytical chemical measurements (+40 pos.; +$4,330); long-term research for developing atomic scale devices (+9 pos.; +$1,000); and measurement techniques and data to support biochemical manufacturing processes (+29 pos.;+$2,300).

Materials science and engineering	251	25,045	+20	+2,250

Increases will expand development of measurements and standards for advanced composite materials (+10 pos.; +$1,000) and intelligent processing of materials (+10 pos.; +$1,250).

Engineering measurements and standards	430	39,397	+151	+15,800

Increases will provide measurement technology, standards, and services for the components of lightwave systems (+50 pos.; +$5,500); high temperature superconductors (+17 pos.; +$1,900); advanced semiconductors (+41 pos.; +$3,900); and intelligent machines and processes (+49 pos.; +$5,000). Funding for studies in general toxicity and alternate refrigerants are not continued in 1991 (-6 pos.; -$500).

Computer sciences and technology	123	9,919	+36	+3,500

Increases will address the requirements of the Computer Security Act of 1987 (+24 pos.; +$2,500), including emergency response to virus attacks, and provide industry-wide coordination of standards for multivendor Integrated Services Digital Networks (ISDN) (+12 pos.; +$1,000).

Industrial technology services	97	26,086	-7	-3,950

The Regional Centers for the Transfer of Manufacturing Technology will be funded at $5 million in FY 1991 (-3 pos.; -$2,500). The Advanced Technology Program will be continued at $10 million. Funds are not requested for the State Extension Services Program (-3 pos.; -$1,300) and the Non-Energy Related Inventions Program (-1 pos.; -$150).

Research support services	187	25,470	+26	+4,122

An increase is requested to upgrade the NIST scientific computing facility to meet rapidly expanding needs for scientific computing capability (+26 pos.; +$3,122) and for safety, system capacity, and obsolescence requirements of the NIST physical (+1,000).

Comparison of Appropriation by Activity

National Institute of Standards and Technology: Measurement and engineering research and standards:	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Measurement research and standards	449	$42,609	443	$43,139	521	$50,769	78	$7,630
Materials science and engineering	255	24,707	251	25,045	271	27,295	20	2,250
Engineering measurements and standards	438	40,136	430	39,397	581	55,197	151	15,800
Computer sciences and technology	124	9,625	123	9,919	159	13,419	36	3,500
Industrial technology services	99	37,502	97	26,086	90	22,136	(7)	(3,950)
Research support activities	191	25,876	187	25,470	213	29,592	26	4,122
Obligated through Working Capital Fund				(361)		(9,772)		(9,611)
TOTAL DIRECT [illegible]TIONS:	1,556	180,455	1,531	168,695	1,835	188,636	304	19,961
FINANCING:								
Unobligated balance available, beginning of year		(17,149)						
TOTAL BUDGET AUTHORITY:	1,556	163,306	1,531	168,695	1,835	188,636	304	19,961
TRANSFERS:								
To "Working capital fund"		539		361		9,772		9,611
From "Earthquake investigation funds"		(2,000)						
Reduction pursuant to P.L. 99-177		1,764						
TOTAL APPROPRIATION:	1,556	163,609	1,531	169,056	1,835	198,408	304	29,352

Summary of Changes from 1990 Appropriation

National Institute of Standards and Technology: Measurement and engineering research and standards:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			1,556	$163,609
Reduction pursuant to P.L. 99-177				(1,764)
Appropriation currently available, 1990			1,556	161,845
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Additional amount in FY 1991 to provide full-year cost		$2,989		
Less amount absorbed in FY 1990				
Subtotal, adjustment for 1991 pay increase				2,989
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		2,104		
Less amount absorbed in FY 1991		(1,052)		
Subtotal, adjustment for 1991 pay increase				1,052
ADJUSTMENT FOR 1991 SENIOR EXECUTIVE PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		740		
Less amount absorbed in FY 1991		(370)		
Subtotal, adjustment for 1991 pay increase				370
OTHER COST CHANGES:				
Salaries and benefits:				
Extra compensable day		315		
FERS basic benefits and Thrift Plan		372		
Civil Service Retirement System		(171)		
Federal Insurance Contributions Act (FICA)		177		
Health insurance premium		554		
Employees' Compensation Fund		18		
Other objects:				
Communications, utilities and misc. charges		(91)		
Rent payments to others		7		
Printing and reproduction		34		
Other services		912		
Supplies and materials		953		
Equipment		361		
Management savings (A-76)	(25)	(641)		
Subtotal, other cost changes			(25)	2,800
Total, adjustments to base			(25)	7,211
1991 base			1,531	169,056
Program changes			304	29,352
Transfer to "Working capital fund"				(9,772)
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			1,835	188,636
Working Capital Fund obligations			1,272	9,772
TOTAL 1991 APPROPRIATION:			3,107	198,408

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

The National Telecommunications and Information Administration (NTIA) formulates national policy to support the development, growth and deregulation of the telecommunications and information industries; furthers the efficient development and use of telecommunications and information services; and allocates and manages Federal use of the radio frequency spectrum. The Public Telecommunications Facilities grants program which has provided grants for planning and construction of non-commercial telecommunications facilities will be phased out by the end of FY 1990.

Summary

Appropriation

FEDERAL FUNDS:	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	$13,630	$14,002	$15,252	$1,250
Public telecommunications facilities planning and construction	20,000	20,000	0	(20,000)
TOTAL APPROPRIATION:	33,630	34,002	15,252	(18,750)

Permanent Positions

	1989	1990	1991 Estimate	Increase (Decrease)
Appropriation:				
Salaries and expenses	172	180	184	4
Public telecommunications facilities planning and construction	13	15	0	(15)
TOTAL:	185	195	184	(11)

HIGHLIGHTS OF PROGRAM CHANGES
(Dollars in Thousands)

	Base Perm. Positions	Base Amount	Increase/(Decrease) Perm. Positions	Increase/(Decrease) Amount
Domestic and international policies (NTIA-23)	9	$918	+4	+$370

An increase is included to undertake research and advocate policies related to the development of advanced or high definition television (HDTV) systems in the U.S. This research will assist the Federal Communications Commission in the development of an HDTV transmission and production standard.

Public telecommunications facilities (NTIA-3)	15	$20,000	-15	-$20,000

The Public Telecommunications Facilities grant program has provided for planning and construction of public telecommunications facilities in areas not previously served. Since over 95 percent of the United States currently receives public broadcast programming, funding for this grant program has not been requested in FY 1991.

Comparison of Appropriation by Activity

National Telecommunications and Information Administration: Salaries and expenses:	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Base Perm. Pos.	1991 Base Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Increase/ (Decrease) Perm. Pos.	Increase/ (Decrease) Amount
DIRECT OBLIGATIONS:								
Domestic and int'l. policies:								
Domestic policies	9	$890	9	$918	13	$1,288	4	$370
International policies	14	1,659	14	1,699	14	1,699		
Subtotal	23	2,549	23	2,617	27	2,987	4	370
Spectrum management:								
Spectrum plans & policies	19	1,698	19	1,720	19	1,720		
Spectrum management, analysis & operations	105	6,438	105	6,753	105	6,753		
Subtotal	124	8,136	124	8,473	124	8,473		
Telecom. sciences research:								
Spectrum research & analysis	19	1,772	19	2,019	19	2,019		
Systems & networks research & analysis	14	1,705	14	1,773	14	1,773		
Subtotal	33	3,477	33	3,792	33	3,792		

National Telecommunications and Information Administration: Salaries and expenses:	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
TOTAL DIRECT OBLIGATIONS:	180	14,162	180	14,882	184	15,252	4	370
REIMBURSABLE OBLIGATIONS:	72	6,800	72	6,800	72	6,800		
TOTAL OBLIGATIONS:	252	20,962	252	21,682	256	22,052	4	370
FINANCING:								
Offsetting collections from:								
Federal funds		(6,650)				(6,650)		
Non-Federal sources		(150)				(150)		
Unobligated balance available, beginning of year		(160)						
Subtotal, financing		(6,960)				(6,800)		
TOTAL BUDGET AUTHORITY:	252	14,002			256	15,252		
TOTAL APPROPRIATION:	252	14,002			256	15,252		

Summary of Changes from 1990 Appropriation

National Telecommunications and Information Administration: Salaries and expenses:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation, 1990			180	$14,200
Reduction pursuant to P.L. 99-177				(198)
Appropriation currently available, 1990				14,002
ADJUSTMENTS TO BASE:				
ADJUSTMENT FOR 1990 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1990 of general pay increase		$323		
Less amount absorbed in FY 1991				
Subtotal, adjustment for 1990 pay increase				323
ADJUSTMENT FOR 1991 PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of general pay increase		252		
Less amount absorbed in FY 1991		(126)		
Subtotal, adjustment for 1991 pay increase				126
ADJUSTMENT FOR 1991 SES PAY INCREASE AND RELATED COSTS:				
Cost in FY 1991 of SES pay increase		152		
Less amount absorbed in FY 1991		(76)		
Subtotal, adjustment for 1991 SES pay increase				76

National Telecommunications and Information Administration: Salaries and expenses:	Perm. Pos.	Amount	Perm. Pos.	Amount
OTHER COST CHANGES:				
Non-recurring adjustment		150		
Health insurance		104		
Extra compensable day		36		
Full year cost of annualization		22		
Federal Insurance Contribution Act (FICA)		10		
FERS basic benefits and Thrift Plan		8		
Civil Service Retirement System		(3)		
Employees' Compensation Fund		6		
Other objects:				
Supplies		4		
Working Capital Fund		17		
Rental payments to GSA		56		
Federal Telecommunications System		(58)		
Printing		3		
Subtotal, other cost changes				$355
TOTAL, adjustments to base				880
1991 base			180	14,882
Program changes			4	370
TOTAL DIRECT OBLIGATIONS (1991 ESTIMATE):			184	15,252
TOTAL 1991 APPROPRIATION:			184	15,252

Comparison of Appropriation by Activity

National Telecommunications and Information Administration: Public telecommunications facilities, planning and construction	1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
DIRECT OBLIGATIONS:								
Public telecommunications facilities	15	$20,000	15	$20,000			(15)	($20,000)

Summary of Changes from 1990 Appropriation

National Telecommunications and Information Administration: Public telecommunications facilities, planning and construction	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1990			15	$20,000
1991 base			15	20,000
Program changes			(15)	(20,000)
TOTAL OBLIGATIONS (1991 ESTIMATE)				

BRIDGE FROM 1990 AND 1991 APPROPRIATIONS TO 1990 AND 1991 BUDGET AUTHORITY

(Dollar amounts in thousands)

	1990	1991	Change 1990 - 1991
Annual appropriation act	$3,497,024	$2,435,694	($1,061,330)
Transfer to "Scientific and technical research and services", NIST	2,000		(2,000)
Transfer to "Promote and develop fishery products and research pertaining to American fisheries", NOAA	61,935	61,900	(35)
Borrowing authority	10,000	5,400	(4,600)
Reduction pursuant to P.L. 99-177	(18,262)		18,262
Subtotal, Federal funds	3,552,697	2,502,994	(1,049,703)
Trust funds	79,783	133,202	53,419
Offsetting receipts	(74,838)	(91,940)	(17,102)
BUDGET AUTHORITY, Department of Commerce	3,557,642	2,544,256	(1,013,386)

COMPARISON OF 1991 ESTIMATE WITH 1989 AND 1990 APPROPRIATIONS ENACTED TO DATE

(Dollar amounts in thousands)

	1989 Actual		1990 Appropriation		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
GENERAL ADMINISTRATION:								
Salaries and expenses	478	$40,404	348	$28,173	356	$30,326	8	$2,153
Office of the Inspector General			209	13,500	214	15,115	5	1,615
Subtotal, GA	478	40,404	557	41,673	570	45,441	13	3,768
ECONOMIC DEVELOPMENT ADMINISTRATION:								
Salaries and expenses	325	24,742	360	25,475	150	20,000	(200)	(5,475)
Economic development assistance							0	0
programs		182,028		191,196			0	(191,196)
Subtotal, EDA	325	206,770	360	216,671	160	20,000	(200)	(196,671)
BUREAU OF THE CENSUS:								
Salaries and expenses	2,019	96,035	2,230	101,288	2,402	115,233	172	13,945
Periodic censuses & programs	2,448	517,304	3,544	1,322,967	4,177	316,104	633	(1,006,863)
Subtotal, Census	4,467	613,339	5,774	1,424,255	6,579	431,337	805	(992,918)
ECONOMIC AND STATISTICAL ANALYSIS:								
Salaries and expenses	431	32,899	531	31,150	627	39,948	96	8,798
INTERNATIONAL TRADE ADMINISTRATION:								
Operations and administration	2,021	167,502	2,446	181,296	2,577	189,020	131	7,724
BUREAU OF EXPORT ADMINISTRATION:								
Operations and administration	475	40,106	565	42,000	594	44,373	29	2,373
MINORITY BUSINESS DEVELOPMENT AGENCY:								
Minority business development	188	39,705	216	39,741	224	46,161	8	6,420
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:								
Salaries and expenses	85	13,800	91	14,300	91	14,362		62

	1989 Actual		1990 Appropriation		1991 Estimate		Increase/ (Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:								
Operations, research, and facilities	10,054	1,240,052	10,034	1,214,607	9,949	1,316,064	(85)	101,457
Fishing vessel and gear damage compensation fund	3		3	1,000	3	1,202	0	202
Fishermen's contingency fund	1	719	1	736	1	1,000	0	264
Foreign fishing observer fund	5	1,642	15	1,986	15	1,997	0	11
Federal ship financing fund	21		21		21		0	
Fisheries promotional fund	3		3				(3)	
Promote and develop...American fisheries			11				(11)	
Subtotal, NOAA	10,087	1,242,413	10,088	1,218,329	9,989	1,320,263	(99)	101,934
PATENT AND TRADEMARK OFFICE:								
Salaries and expenses	3,724	109,000	3,898	85,900	4,765	112,027	867	26,127
TECHNOLOGY ADMINISTRATION:								
Salaries and expenses			59	3,900	59	4,583	0	683
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY:								
Scientific and technical research and services	1,489	159,000	1,556	163,609	1,835	198,408	279	34,799
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION:								
Salaries and expenses	172	13,630	180	14,200	184	15,252	4	1,052
Public telecommunications facilities, planning and construction	13	20,000	15	20,000			(15)	(20,000)
Subtotal, NTIA	185	33,630	195	34,200	184	15,252	(11)	(18,948)
Subtotal, Department of Commerce	23,955	2,698,568	26,336	3,497,024	28,256	2,481,175	1,918	(1,015,849)
Proposed for later transmittal:								
National Oceanic and Atmospheric Administration:								
Operations,research,and facilities					(752)	(45,481)	(752)	(45,481)
Total, Department of Commerce	23,955	2,698,568	26,336	3,497,024	27,502	2,435,694	1,166	(1,061,330)

COMPARISON OF 1990 APPROPRIATIONS TO 1990 POST SEQUESTER BUDGET AUTHORITY

(Dollar amounts in thousands)

	1990 APPROPRIATION	ADJUSTED SEQUESTER	NET AMOUNT AVAILABLE	BUDGET AUTHORITY CHANGES	BUDGET AUTHORITY
GENERAL ADMINISTRATION:					
Salaries and expenses	28,173	352	27,821		27,821
Office of the Inspector General	13,500	169	13,331		13,331
Subtotal, GA	41,673	521	41,152		41,152
ECONOMIC DEVELOPMENT ADMINISTRATION:					
Salaries and expenses	25,475	119	25,356		25,356
Economic development assistance programs	191,196	2,640	188,556		188,556
Subtotal, EDA	216,671	2,759	213,912		213,912
BUREAU OF THE CENSUS:					
Salaries and expences	101,288	1,398	99,890		99,890
Periodic censuses and programs	1,322,967	8,131	1,314,836		1,314,836
Subtotal, Census	1,424,255	9,529	1,414,726		1,414,726
ECONOMIC AND STATISTICAL ANALYSIS:					
Salaries and expenses	31,150	242	30,908		30,908
INTERNATIONAL TRADE ADMINISTRATION:					
Operations and administration	181,296	2,437	178,859		178,859
BUREAU OF EXPORT ADMINISTRATION:					
Operations and administration	42,000	584	41,416		41,416
MINORITY BUSINESS DEVELOPMENT AGENCY:					
Minority business development	39,741		39,741		39,741
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:					
Salaries and expenses	14,300	178	14,122		14,122
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:					
Operations, research and facilities	1,214,607		1,214,607	59,500 1/	1,274,107
Coastal energy impact fund				(4,500)2/	(4,500)
Federal ship financing fund, fishing vessels				10,000 3/	10,000
Fishing vessel & gear damage compensation fund	1,000		1,000		1,000
Fishermen's contingency fund	736	2	734		734
Foreign fishing observer fund	1,986	23	1,963		1,963
Fisheries promotional fund				2,000 4/	2,000
Promote and develop...American fisheries				4,935 5/	4,935
Subtotal, NOAA	1,218,329	25	1,218,304	71,935	1,290,239
PATENT AND TRADEMARK OFFICE:					
Salaries and expenses	85,900		85,900		85,900
TECHNOLOGY ADMINISTRATION:					
Salaries and expenses	3,900	25	3,875		3,875
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY:					
Scientific and technical research and services	163,609	1,764	161,845	1,461 6/	163,306
Working Capital Fund				539 7/	539
Subtotal, NIST	163,609	1,764	161,845	2,000	163,845
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMIN.:					
Salaries and expenses	14,200	198	14,002		14,002
Public telecommunications facilities program	20,000		20,000		20,000
Subtotal, NTIA	34,200	198	34,002		34,002
TOTAL, DEPARTMENT OF COMMERCE	3,497,024	18,262	3,478,762	73,935	3,552,697

1/ Transfer from P&D, +$55,000,000; transfer of unobligated balance from CEIF, +4,500,000 scored as budget authority.

2/ Transfer of unobligated balance to ORF, scored as budget authority.

3/ Borrowing authority.

4/ Transfer from P&D.

5/ Transfer from Department of Agriculture, +$61,935,000; transfer to GRF, -$55,000,000; transfer to FPF, -$2,000,000.

6/ Transfer under the National Earthquake Hazards Reduction Program pursuant P.L. 101-130, +$2,000,000; transfer to WCF, -$539,000.

7/ Transfer from STRS.

The 1990 appropriations (P.L. 101-162) are $3,497,024,000. The amounts sequestered pursuant to Public Laws 99-177 and 100-119, after adjustment for savings in enacted appropriations, total $18,262,000.

COMPARISON OF 1991 APPROPRIATIONS TO 1990 APPROPRIATIONS LESS SEQUESTERS

(Dollar amounts in thousands)

	1990 APPROPRIATION	ADJUSTED SEQUESTER	NET AMOUNT AVAILABLE	1991 APPROPRIATION	DIFFERENCE
GENERAL ADMINISTRATION:					
Salaries and expenses	28,173	352	27,821	30,326	2,505
Office of the Inspector General	13,500	169	13,331	15,115	1,784
Subtotal, GA	41,673	521	41,152	45,441	4,289
ECONOMIC DEVELOPMENT ADMINISTRATION:					
Salaries and expenses	25,475	119	25,356	20,000	(5,356)
Economic development assistance programs	191,196	2,640	188,556		(188,556)
Subtotal, EDA	216,671	2,759	213,912	20,000	(193,912)
BUREAU OF THE CENSUS:					
Salaries and expenses	101,288	1,398	99,890	115,233	15,343
Periodic censuses and programs	1,322,967	8,131	1,314,836	316,104	(998,732)
Subtotal, Census	1,424,255	9,529	1,414,726	431,337	(983,389)
ECONOMIC AND STATISTICAL ANALYSIS:					
Salaries and expenses	31,150	242	30,908	39,948	9,040
INTERNATIONAL TRADE ADMINISTRATION:					
Operations and administration	181,296	2,437	178,859	189,020	10,161
BUREAU OF EXPORT ADMINISTRATION:					
Operations and administration	42,000	584	41,416	44,373	2,957
MINORITY BUSINESS DEVELOPMENT AGENCY:					
Minority business development	39,741		39,741	46,161	6,420
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:					
Salaries and expenses	14,300	178	14,122	14,362	240
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:					
Operations, research and facilities	1,214,607		1,214,607	1,316,064	101,457
Fishing vessel & gear damage compensation fund	1,000		1,000	1,202	202
Fishermen's contingency fund	736	2	734	1,000	266
Foreign fishing observer fund	1,986	23	1,963	1,997	34
Subtotal, NOAA	1,218,329	25	1,218,304	1,320,263	101,959
PATENT AND TRADEMARK OFFICE:					
Salaries and expenses	85,900		85,900	112,027	26,127
TECHNOLOGY ADMINISTRATION:					
Salaries and expenses	3,900	25	3,875	4,583	708
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY:					
Scientific and technical research and services	163,609	1,764	161,845	198,408	36,563
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMIN.:					
Salaries and expenses	14,200	198	14,002	15,252	1,250
Public telecommunications facilities program	20,000		20,000		(20,000)
Subtotal, NTIA	34,200	198	34,002	15,252	(18,750)
SUBTOTAL, DEPARTMENT OF COMMERCE	3,497,024	18,262	3,478,762	2,481,175	(997,587)
Proposed for later transmittal:					
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION					
Operations, research and facilities				(45,481)	(45,481)
TOTAL, DEPARTMENT OF COMMERCE	3,497,024	18,262	3,478,762	2,435,694	(1,043,068)

Summary of Requirements with Detail of Adjustments to Base and Built-in Changes

(Dollar amounts in thousands)

	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriations currently available, 1990			26,321	3,478,762
Adjustments to base and built-in changes:				
Planned cyclical changes in periodic censuses			622	(1,011,198)
Transfers:				
To "Salaries & Expenses, Reimb", ESA from "Salaries & Expenses", Census			(4)	
To "Operations, Research & Facilities", NOAA from "P&D", NOAA			(11)	55,000
To "Operations, Research & Facilities", NOAA from "CEIF", NOAA				4,500
To "Aviation Weather Trust Fund", NOAA from "ORF", NOAA				(5,357)
To "Operations, Research & Facilities", NOAA from "FPF", NOAA			(3)	
GRH Reductions				
Total GRH reductions in 1991	(71)	(25,058)		—
Sequester applied in 1990 (included in base)	55	18,262		
Additional reduction required for full-year effect in FY 1991 of 1990 sequester			(16)	(6,796)
Adjustment for 1990 pay increase and related costs				
Total cost in 1990 of pay increase		34,444		
Less amount absorbed		(34,444)		
Anticipated 1990 pay increase supplemental				
Additional amount in 1991 to provide full-year cost of pay increase		39,481		
Less amount absorbed		(387)		
Subtotal, adjustment for 1990 pay increase				39,094
Adjustment for 1991 pay increase and related costs				
Total cost in 1991 of general pay increase		31,390		
Less amount absorbed		(15,700)		
Subtotal, adjustment for 1991 general pay increase		15,690		
Total cost in 1991 of SES pay increase		6,025		
Less amount absorbed		(3,013)		
Subtotal, adjustment for 1991 SES pay increase		3,012		
Total adjustment for 1991 pay increases				18,702
Financing:				
From recoveries from prior year obligations				6,000
Fees collections in 1990				189,977
Other changes:				
A-76 savings	(1)	(1,841)		
Full-year cost in 1991 of positions financed for part year in 1990		857		
Pay increases		737		
Overseas wage increases		1,631		
One more compensable day		3,368		
Civil Service Retirement (CSRS)		(1,361)		
Federal Employees' Retirement System (FERS)		2,603		
Thrift Plan		368		
Federal Insurance Contributions Act (FICA):				
OASDI		1,406		
Medicare		154		
Benefits for former personnel		51		
Health insurance premium		4,157		
Employees' Compensation Fund		419		
Travel and transportation of persons		140		
Travel and transportation of things		24		
Rent payments to GSA		5,037		
Rent payments to others		664		
Federal Telecommunications System		(3,616)		
Other telephone services/utilities		530		
U.S. Postal Service		24		

	Perm. Pos.	Amount	Perm. Pos.	Amount
Printing and reproduction		2,676		
Working Capital Fund		1,195		
Other services		2,125		
Supplies and materials		1,638		
Equipment		427		
Grants, subsidies and contributions		7,919		
Overseas price increase		1,016		
Regional Administrative Support Centers, BXA		36		
Adjustment for phase II of foreign availability, BXA	15	765		
Non-recurring programs: ITA, NOAA, NTIA	(8)	(13,455)		
Subtotal, other changes			6	19,694
Total, adjustments to base and built-in changes			608	(690,384)
1991 base			26,929	2,788,378
Program changes			1,325	10,317
Total requirements			28,254	2,798,695
Fee collections				(241,620)
Recoveries from prior year obligations				(6,000)
Transfers				(69,900)
1991 APPROPRIATION			28,254	2,481,175

COMPARISON BY BUREAU OF ADJUSTMENTS TO BASE

1991 ESTIMATE AND PROGRAM CHANGES

(Dollar amounts in thousands)

	Net Adjustments To Base		1991 Base		1991 Estimate		Inc. or (Dec.) over 1990 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
General Administration		$2,393	557	$43,545	570	$45,441	13	$1,896
Economic Development Administration		9,168	360	223,080	160	20,000	(200)	(203,080)
Bureau of the Census	618	(994,114)	6,392	420,612	6,579	431,337	187	10,725
Economic and Statistical Analysis		2,045	531	32,953	627	39,948	96	6,995
International Trade Administration		2,297	2,446	181,156	2,577	189,020	131	7,864
Bureau of Export Administration	(1)	1,466	564	42,882	594	44,373	30	1,491
Minority Business Development Agency		808	216	40,549	224	46,161	8	5,612
United States Travel & Tourism Admin		651	91	14,773	91	14,362		(411)
National Oceanic & Atmospheric Admin	(8)	73,243	10,080	1,291,547	9,989	1,396,163	(91)	104,616
Patent and Trademark Office	24	203,010	3,922	288,910	4,765	353,647	843	64,737
Technology Administration		558	59	4,433	59	4,583		150
National Inst. of Standards & Tech	(25)	7,211	1,531	169,056	1,835	198,408	304	29,352
National Telecommunications and Information Administration		880	180	34,882	184	15,252	4	(19,630)
Total requirements	608	(690,384)	26,929	2,788,378	28,254	2,798,695	1,325	10,31
Fee collections						(241,620)		
Recoveries from past year obligations						(6,000)		
Transfers						(69,900)		
1991 appropriation request					28,254	2,431,175		

Authorizing Legislation Required for FY 1991

Appropriation and activity	Existing Authority	Exp. Date	Amount Requested ($000s)
Continuing Programs:			
International Trade Admin.			
Operations and Administration:			
(Export promotion programs)			
Export Administration Amendments Act (Sec. 2430)	P.L. 100-418	9/30/90	$164,599
Bureau of Export Admin.			
Operations and Administration:			
Export Administration Amendments Act	P.L. 100-418	9/30/89	41,636
Defense Production Act, as amended	P.L. 101-137	8/10/90	2,737
Subtotal, BXA			44,373
Minority Business Development Agency	E.O. 11625	N/A	46,161
United States Travel and Tourism Administration 1/			
Salaries and expenses:			
National Tourism Policy Act	P.L. 97-63	9/30/82	14,362
National Oceanic & Atmospheric Administration:			
Operations, research, & facil:			
Magnuson Fishery Conserv. and Management Act	P.L. 99-659	9/30/89	75,919
Marine Fisheries Program Authorization Act	P.L. 99-659	9/30/89	54,482
Land Remote Sensing Commercialization Act	P.L. 99-62	9/30/89	36,334
Airport and Airways Improvement Act	P.L. 100-223	9/30/90	34,521
Coastal Zone Mngt. Act	P.L. 99-626	9/30/90	36,205
Marine Protection, Research & Sanct. Act (Title II)	P.L. 100-627	9/30/90	13,900
National Ocean Pollution Planning Act	P.L. 100-626	9/30/90	45,776
National Sea Grant College Program Act	P.L. 100-220	9/30/90	27,498
Subtotal, NOAA			324,635

Technology Administration:			
Salaries and expenses:			
National Inst. of Standards and Tech. Auth. Act (Sections 103 & 104)	P.L. 100-519	9/30/89	4,333
Technology Competitiveness Act (Section 5152(b))	P.L. 100-418	9/30/90	250
Subtotal, TA			4,583
National Inst. of Standards and Technology:			
Scientific & tech. research and services:			
National Inst. of Standards and Tech. Auth. Act (Section 102)	P.L. 100-519	9/30/89	183,408
Tech. Competitiveness Act (Sections 5121(a),5131(a))	P.L. 100-418	9/30/90	15,000
Subtotal, NIST			198,408
National Telecommunications and Information Administration:			
Salaries and expenses:			
National Telecomm. and Information Admin. Auth. Act	P.L. 100-584	9/30/89	15,252
Total, Department of Commerce			812,373
Proposed for later transmittal:			
National Oceanic & Atmospheric Administration:			
Marine Waterways Trust Fund:			
Harbor Maintenance user fees			45,481

1/ The Administration will separately repropose legislation to establish a travel promotion fee to be deposited into the U.S. Treasury.

BUDGET AUTHORITY BY FUNCTION

(Dollar amounts in thousands)

Function/Program	1989	1990	1991	Change 1990 - 1991
300 NATURAL RESOURCES AND ENVIRONMENT				
306 Other natural resources				
National Oceanic and Atmospheric Administration	$1,285,652	$1,274,107	$1,385,964	$111,857
370 COMMERCE AND HOUSING CREDIT				
376 Other advancement and regulation of Commerce:				
General Administration	40,404	27,821	30,326	2,505
Bureau of the Census	655,351	1,414,726	431,337	(983,389)
Economic and Statistical Analysis	32,899	30,908	39,948	9,040
International Trade Administration	167,502	178,859	189,020	10,161
Bureau of Export Administration	40,106	41,416	44,373	2,957
Minority Business Development Agency	39,705	39,741	46,161	6,420
United States Travel and Tourism Administration	13,800	14,122	14,362	240
National Oceanic and Atmospheric Administration	10,449	20,632	9,599	(11,033)
Patent and Trademark Office	109,000	85,900	112,027	26,127
Technology Administration		3,875	4,583	708
National Institute of Standards and Technology	159,000	163,845	198,408	34,563
National Telecommunications and Information Administration	13,630	14,002	15,252	1,250
Total, Commerce and housing credit	2,567,498	3,309,954	2,521,360	(788,594)
450 COMMUNITY AND REGIONAL DEVELOPMENT				
452 Area and regional development				
General Administration		13,331	15,115	1,784
Economic Development Administration	206,770	213,912	20,000	(193,912)
National Oceanic and Atmospheric Administration		(4,500)	(8,000)	(3,500)
Total, Community and regional development	206,770	222,743	27,115	(195,628)
500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES				
503 Research and general education aids:				
National Telecommunications and information Administration	20,000	20,000		(20,000)
Subtotal, Federal funds	2,794,268	3,552,697	2,548,475	(1,004,222)
Trust funds	73,031	79,783	87,721	7,938
Offsetting receipts	(59,888)	(74,838)	(91,940)	(17,102)
Subtotal, Department of Commerce	2,807,411	3,557,642	2,544,256	(1,013,386)
Proposed for later transmittal:				
300 NATURAL RESOURCES AND ENVIRONMENT				
306 Other natural resources:				
National Oceanic and Atmospheric Administration				
Federal Funds			(45,481)	(45,481)
Trust Funds			45,481	45,481
Total, Department of Commerce	2,807,411	3,557,642	2,544,256	(1,013,386)

SUMMARY OF BUDGET AUTHORITY -1991 - 1995

(Dollar amounts in millions)

	1991	1992	1993	1994	1995
General Administration	$45	$47	$49	$50	$52
Economic Development Administration	20	9	4	1	1
Bureau of the Census	431	300	312	247	243
Economic and Statistical Analysis	40	39	41	42	43
International Trade Administration	189	192	198	204	210
Bureau of Export Administration	44	47	49	50	51
Minority Business Development Agency	46	48	50	51	53
United States Travel and Tourism Administration	14	15	15	15	15
National Oceanic and Atmospheric Administration	1,388	1,410	1,427	1,430	1,232
Patent and Trademark Office	112	119	107	109	99
Technology Administration	5	5	5	5	5
National Institute for Standards Technology	198	208	210	214	218
National Telecommunications and Information Admin.	15	16	16	17	17
Subtotal, Federal funds	2,548	2,456	2,481	2,436	2,239
Trust funds	88	92	95	98	101
Offsetting receipts	(92)	(102)	(102)	(104)	(107)
Subtotal, Department of Commerce	2,544	2,446	2,474	2,430	2,233
Proposed for later transmittal:					
National Oceanic and Atmospheric Administration					
Operations, research & facilities, Federal funds	(45)	(45)	(45)	(45)	(45)
Marine Waterways Trust Fund	45	45	45	45	45
	2,544	2,446	2,474	2,430	2,233

SUMMARY OF OUTLAYS - 1991-1995

(Dollar amounts in millions)

	1991	1992	1993	1994	1995
General Administration	$47	$47	$49	$50	$52
Economic Development Administration	190	111	51	2	(5)
Bureau of the Census	443	311	314	253	243
Economic and Statistical Analysis	39	40	41	42	43
International Trade Administration	185	191	196	202	208
Bureau of Export Administration	44	47	48	50	51
Minority Business Development Agency	48	47	49	50	52
United States Travel and Tourism Administration	14	14	15	15	15
National Oceanic and Atmospheric Administration	1,422	1,499	1,548	1,556	1,301
Patent and Trademark Office	112	116	113	108	103
Technology Administration	4	5	5	5	5
National Institute for Standards Technology	189	207	209	214	217
National Telecommunications and Information Admin.	36	30	21	16	17
Subtotal, Federal funds	2,774	2,665	2,657	2,564	2,303
Trust funds	89	92	95	98	101
Offsetting receipts	(92)	(102)	(102)	(104)	(107)
Subtotal, Department of Commerce	2,771	2,655	2,650	2,558	2,296
Proposed for later transmittal:					
National Oceanic and Atmospheric Administration					
Operations, research & facilities, Federal funds	(45)	(45)	(45)	(45)	(45)
Marine Waterways Trust Fund	45	45	45	45	45
	2,771	2,655	2,650	2,558	2,296

NOTE: Detail may not add due to rounding

1991 PROPOSED FOR LATER TRANSMITTAL

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Legislation will be proposed to augment the Harbor Maintenance Trust Fund. Funds are proposed to be appropriated from the Harbor Maintenance Trust Fund to the Marine Waterways Trust Fund to support various marine-related programs currently funded by direct appropriations in the Operations, research and facilities (ORF) account. Permanent positions and funding in the direct ORF appropriation will decrease by the same amount.

	1991 Estimate	
	Perm. Pos.	Amount
Marine Waterways Trust Fund	0	$ 45,481
Offset to ORF reimbursable	0	-45,481
Operations, research, and facilities reimbursable program:		
National Ocean Service	390	20,521
National Weather Service	90	5,301
Program Support	272	19,659
Total, ORF	752	45,481

Glossary of Terms

Budget Authority

Budget authority for any year represents the authority to incur obligations, requiring either immediate or future payment, which will become available during the year. Appropriations on which the Congress acts are the most common form of budget authority, allowing Federal agencies to make payments out of the Treasury for specified purposes.

Deferral

Any action or inaction by an officer or employee of the United States that temporarily withholds, delays or effectively precludes the obligation or expenditure of budget authority. Deferrals may not extend beyond the end of the fiscal year.

Federal Funds

Funds collected and used by the Federal Government for the general purposes of the Government. There are four types of Federal fund accounts: the general fund, special funds, public enterprise (revolving) funds, and intra-governmental funds. The major Federal funds is the general fund, which is derived from general taxes and borrowing.

Full-time Equivalent (Workyears) Employment

Compensable workyears for all Federal personnel, calculated by dividing the total number of hours (worked or to be worked) by the number of compensable hours applicable to each fiscal year (8 x the number of compensable days in each fiscal year.) For a fiscal year with 260 days, the divisor is 2080; for 261 days, 2088; for 262 days, 2096.

Offsetting Receipts

Collections deposited in receipt accounts that are offset against budget authority and outlays rather than being counted as budget receipts. These collections are derived from other Government accounts or from Government activities that are of a business-type or market-oriented nature.

Outlays

Obligations incurred under budget authority are generally liquidated by the issuance of checks by the Treasury. Such payments are called outlays. Outlays during any fiscal year may be payments of obligations incurred in prior fiscal years or in the same fiscal year.

Permanent Positions (Perm. Pos.)

Permanent positions are funded positions which are occupied or expected to be occupied by full-time employees with permanent appointments as of September 30 of each year.

Rescission

Enacted legislation canceling budget authority previously provided by the Congress.

Sequestration

The terms "sequester" and "sequestration" refer to or mean the reduction or cancellation of new budget authority; unobligated balances, new loan guarantee commitments or limitations; new direct loan obligations, commitments or limitations; spending authority as defined in Section 401(c) (2) of the Congressional Budget Act of 1974; and obligation limitations.

Supplemental Appropriation

An act appropriating funds in addition to those in an annual appropriation act. Supplemental appropriations provide additional budget authority beyond original estimates for programs or activities (including new programs authorized after the date of the original appropriation act) for which the need for funds is too urgent to be postponed until enactment of the next regular appropriation act.

Trust Funds

Funds collected and used by the Federal Government for carrying out specified purposes and programs according to terms of a trust agreement or statute, such as the social security and unemployment trust funds. Trust funds are not available for the general purposes of the Government.

DEPARTMENT OF COMMERCE

SUMMARY SCHEDULES

BUDGET ESTIMATES FISCAL YEAR 1991

CONGRESSIONAL SUBMISSION

JANUARY 1990

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Department of Commerce
1990 Reductions Pursuant to P.L. 99-177
(in thousands of dollars)

	Sequesterable Amounts	Reductions	Total Remaining
General Administration			
Salaries and expenses			
Budget Authority	28,173	(352)	27,821
Office of the Inspector General			
Budget Authority	13,500	(169)	13,331
Bureau of the Census			
Salaries and expenses			
Budget Authority	101,288	(1,398)	99,890
Reimbursements	8,000	(112)	7,888
Periodic Censuses and Programs			
Budget Authority	1,322,967	(8,131)	1,314,836
Economic and Statistical Analysis			
Salaries and expenses			
Budget Authority	31,150	(242)	30,908
Reimbursements	395	(6)	389
Economic Development Administration			
Salaries and expenses			
Budget Authority	25,475	(119)	25,356
Economic Development Assistance Programs			
Budget Authority	191,196	(2,640)	188,556
International Trade Administration			
Operations and administration			
Budget Authority	181,296	(2,437)	178,859
Reimbursements	15,960	(223)	15,737
Bureau of Export Administration			
Operations and administration			
Budget Authority	42,000	(584)	41,416
Minority Business Development Agency			
Budget Authority	39,741	0	39,741
United States Travel and Tourism Administration			
Budget Authority	14,300	(178)	14,122
Reimbursements	1,450	(20)	1,430

Department of Commerce
1990 Reductions Pursuant to P.L. 99-177
(in thousands of dollars)

	Sequesterable Amounts	Reductions	Total Remaining
National Oceanic and Atmospheric Administration			
Operations, research, and facilities			
Budget Authority	1,269,607	0	1,269,607
Reimbursements	11,434	(160)	11,274
Unobligated balance (CEIF)	4,500	0	4,500
Aviation Weather	30,000	(417)	29,583
Coastal Energy Impact Fund			
Unobligated balance	700	-73	627
Federal Ship Financing Fund			
Budget Authority (Borrowing)	10,000	0	10,000
Reimbursements	7,300	-102	7,198
Fishing Vessel & Gear Damage Fund			
Budget Authority	1,000	0	1,000
Fishermen's Contingency Fund			
Budget Authority	736	(2)	734
Foreign Fishing Observer Fund			
Budget Authority	1,986	(23)	1,963
Fisheries Promotional Fund			
Budget Authority	2,000	0	2,000
Promote and Develop...Fisheries			
Budget Authority	4,935	(47)	4,888
Patent and Trademark Office			
Budget Authority	85,900	0	85,900
Reimbursements	180,032	(2,520)	177,512
Technology Administration			
Budget Authority	3,900	(25)	3,875
Trust Fund (NTIS)			
Obligations	50,000	(700)	49,300
National Institute of Standards and Technology			
Budget Authority	163,070	(1,764)	161,306
Working Capital Fund (BA)	539	0	539
National Telecommunications and Information Administration			
Salaries and expenses			
Budget Authority	14,200	(198)	14,002
Public telecommunications facilities			
Budget Authority	20,000	0	20,000
Total obligational authority:			
Budget Authority	3,568,959	(18,309)	3,550,650
Reimbursements	304,571	(4,260)	300,311
Unobligated Balances	5,200	(73)	5,127
Total Reductions, Department of Commerce	3,878,730	(22,642)	3,856,088

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PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - General Administration

Account Title: Salaries and Expenses

Account ID Code: 06-05-0120-376-A

Source: Department of Commerce Appropriation Act, 1990 (P.L. 101-162)

Program, project, activity	Budget Resources Base	 Sequester
1. Executive direction: (BA)		
A. Secretary	917	12
B. Deputy Secretary	651	8
C. Executive Secretariat	595	7
D. Assistant Secretary for Administration	748	9
Subtotal	2,911	36
2. Departmental staff services:		
A. Space Commerce	324	4
B. General Counsel	1,467	18
C. Congressional and Intergovernmental Affairs	1,719	22
D. Public Affairs	607	8
E. Business Liaison	900	11
F. Consumer Affairs	304	4
G. Finance and Federal Assistance	2,266	28
H. Management and Information Systems	2,627	33
I. Personnel and Civil Rights	4,810	60
J. Budget, Planning and Organization	5,370	67
K. Procurement and Administrative Services	4,868	61
Subtotal	25,262	316
Total	28,173	352

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PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - General Administration

Account Title: Office of the Inspector General

Account ID Code: 06-05-0126-452-A

Source: Department of Commerce Appropriations Act, 1990 (P.L. 101-162)

Program, project, activity	Budget Resources Base	 Sequester
1. Executive direction (BA)	425	5
2. Inspections and resource management	1,447	18
3. Audits	9,075	114
4. Investigations	2,553	32
Total	13,500	169

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PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce, Bureau of the Census

Account Title: Salaries and Expenses

Account ID Code: 06-07-0401-376-A

Source: Conference Report (H. Report 101-299)

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
1. Current economic statistics: (BA)		
A. Business statistics		
1. Current retail trade reports	8,579	118
2. Current wholesale trade reports	1,440	20
3. Current service trade reports	2,794	39
4. Statistical sample improvement	1,118	15
Subtotal	13,931	192
B. Construction statistics		
1. Construction permits data	2,060	28
2. Construction starts data	2,437	34
3. Construction value data	3,342	46
Subtotal	7,839	108
C. Manufacturing statistics		
1. Current industrial reports	4,484	62
2. Annual survey of manufacturers	2,220	30
3. Industrial indicators and business investment	3,318	46
4. Special industrial characteristics	1,014	14
Subtotal	11,036	152
D. General economic statistics		
1. Standard statistical establishment list	5,261	73
2. County business patterns	1,003	14
3. Industry & commodity classification	1,331	18
[Classifying new businesses]	[688]	[9]
4. Economic studies	893	12
[National Trade Data Bank]	[425]	[6]
5. Quarterly financial report	2,003	28
Subtotal	10,491	145

(Continued)

Agency: Department of Commerce, Bureau of the Census

Account Title: Salaries and Expenses (continuation)

Account ID Code: 06-07-0401-376-A

Source: Conference Report (H. Report 101-299)

	Budgetary Resources	
Program, project, activity	Base	Sequester
E. Foreign trade statistics		
1. Import statistics	8,145	112
2. Export statistics	6,140	85
3. Trade monitoring	2,155	30
Subtotal	16,440	227
F. Government statistics		
1. Government finance survey	1,556	21
2. Survey of government employment	555	8
3. Tax and intergovernmental revenue	1,639	23
4. Formula grant data	826	11
5. Federal reporting systems	581	8
Subtotal	5,157	71
G. Agriculture statistics	419	6
Subtotal, current economic statistics	65,313	901
2. Current demographic statistics:		
A. Demographic surveys		
1. Current population survey	6,755	93
2. Methods development survey	787	11
3. Survey of income and program participation	20,818	287
Subtotal	28,360	391
B. Demographic reports		
1. Population characteristics	1,754	24
2. Population estimates and projections	1,124	16
3. Demographic analysis	350	5
Subtotal	3,228	45
C. International statistics	694	10

(Continued)

Agency: Department of Commerce, Bureau of the Census

Account Title: Salaries and Expenses (continuation)

Account ID Code: 06-07-0401-376-A

Source: Conference Report (H. Report 101-299)

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
D. Housing statistics	585	8
Subtotal, current demographic statistics	32,867	454
3. Other programs and publications:		
A. Statistical abstracts and supplements	1,707	24
B. General research	711	10
C. Data systems development	690	9
Subtotal, other programs and publications	3,108	43
Subtotal, Salaries and Expenses	101,288	1,398
4. Reimbursable Program (401c - Collection)	8,000	112
Total Salaries and Expenses	109,288	1,510

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce, Bureau of the Census

Account Title: Periodic Censuses and Programs

Account ID Code: 06-07-0450-376-A

Source: Conference Report (H. Report 101-299)

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
1. Economic statistics programs:		
A. Economic censuses		
1. Census of business	6,791	42
2. Census of construction	2,381	15
3. Census of manufactures and mineral industries	5,767	35
4. Transportation characteristics program	753	4
Subtotal	15,692	96
B. Census of Governments		
1. Planning, direction, and review	57	1
2. Government finance	298	2
3. Public employment	166	1
4. Governmental organization	170	1
5. Taxable property values	1,187	7
Subtotal	1,878	12
C. Census of agriculture		
1. Planning, direction and review	5,611	34
2. Census test	250	2
3. Data collection	34	0
4. Data processing	2,362	15
5. Publications	100	1
6. Sampling, statistical standards, and evaluation	227	1
7. Other censuses and surveys	51	0
Subtotal	8,635	53
Subtotal, economic statistics programs	26,205	161

(Continued)

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Agency: Department of Commerce, Bureau of the Census

Account Title: Periodic Censuses and Programs (continuation)

Account ID Code: 06-07-0450-376-A

Source: Conference Report (H. Report 101-299)

			Budgetary Resources	
		Program, project, activity	Base	Sequester
2.		Demographic statistics programs		
	A.	Intercensal demographic estimates	3,356	21
	B.	Decennial census		
		1. Planning, direction and review	14,646	90
		2. Data Collection	942,720	5,794
		3. Operations	229,307	1,409
		[Disability Survey]	[200]	[1]
		4. Product development and data dissemination	12,051	74
		5. Promotion and outreach	20,778	128
		6. Statistical research and evaluation	25,723	158
		7. 21st Century planning staff	753	5
		8. Residential finance survey	453	3
		Subtotal	1,246,431	7,661
		Subtotal, demographic statistics programs	1,249,787	7,682
3.		Sample redesign	1,899	12
4.		Geographic support	8,556	52
5.		Data processing systems	36,520	224
		Total, Periodic Censuses and Programs	1,322,967	8,131

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Economic and Statistical Analysis

Account Title: Salaries and expenses

Account ID Code: 06-08-1500-376-A

Source: Conference Report 101-299 to Accompany H.R. 2991

Program, project, activity	Budgetary Resources	
	Base	Sequester
1. Economic Analysis		
A. National economic accounts:		
(1) National income and product and wealth accounts........	8,168	64
(2) Interindustry accounts......	1,462	11
(3) Regional accounts...........	4,154	32
Subtotal....................	13,784	107
B. Analysis of business trends:		
(1) Business outlook............	1,453	11
(2) Statistical indicators......	1,123	9
(3) Current business analysis...	2,205	17
Subtotal....................	4,781	37
C. International economic accounts:		
(1) Balance of payments.........	3,830	30
(2) International investment and international services estimates.................	3,416	26
Subtotal....................	7,246	56
Subtotal, Economic Analysis	25,811	200
2. Policy Support		
A. Policy support:		
(1) Economic policy support.....	2,893	23
(2) Business analysis...........	2,446	19
Subtotal, Policy Support....	5,339	42
Total, Salaries and Expenses - Direct..........	31,150	242
3. Reimbursable program................	395	6
Total, Salaries and Expenses	31,545	248

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PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Economic Development Administration

Account Title: Salaries and expenses

Account ID Code: 06-05-0125-452-A

Source: P. L. 101-162

Program, project, activity	Budgetary Resources	
	Base	Sequester
1. Executive direction (BA)	$1,496	$7
Assistant Secretary for Economic Development	(428)	(12)
Deputy Assistant Secretary for Economic Development	(218)	(1)
Operations Planning and Analysis	(356)	(2)
Chief Counsel	(494)	(2)
2. Grant programs (BA)	2,407	11
Deputy Assistant Secretary for Grant Programs	(278)	(1)
Economic Adjustment	(330)	(1)
Public Works	(780)	(4)
Planning	(377)	(2)
Technical Assistance and Research	(642)	(3)
3. Loan programs (BA)	695	3
Deputy Assistant Secretary for Loan Programs	(143)	(1)
Credit and Debt Management	(552)	(2)
Liquidation	(0)	(0)
4. Management support (BA)	8,343	39
Deputy Assistant Secretary for Management Support	(289)	(1)
Budget	(3,959)	(19)
Accounting	(579)	(3)
Information Systems	(2,868)	(13)
Executive Secretariat	(135)	(1)
Compliance Review	(513)	(2)
5. Regional operations (BA)	12,534	59
Philadelphia	(2,690)	(13)
Chicago	(1,971)	(9)
Seattle	(2,214)	(10)
Austin	(1,875)	(9)
Atlanta	(2,220)	(11)
Denver	(1,564)	(7)
Total	25,475	119

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Economic Development Administration

Account Title: Economic development assistance programs

Account ID Code: 06-05-2050-452-A

Source: P.L. 101-162

Program, project, activity	Budgetary Resources	
	Base	Sequester
Public works grants (BA)	$111,368	$1,538
Crownpoint Institute of Technology	(1,400)*	(19)
Advanced Science and Technology Commercialization Center	(4,500)*	(62)
City of Beaumont, Texas	(2,400)*	(33)
Polk County and the Cities of Des Moines and Ankeny, Iowa	(2,250)*	(31)
Southeastern Area Technology Development Center, Inc.	(600)*	(8)
2. Planning assistance (BA)	22,995	317
Districts	(15,330)	(211)
Indians	(2,875)	(40)
States	(1,916)	(26)
Urban	(2,874)	(40)
3. Technical assistance (BA)	6,706	93
University Centers	(4,790)	(90)
Marshall University	(200)**	(3)
4. Research and evaluation (BA)	1,210	17
5. Economic adjustment grant (BA)	48,917	675
Sudden and severe projects	(12,454)	(172)
Revolving loan fund projects	(12,203)	(168)
Disaster Relief	(24,260)	(335)
Total	191,196	2,640

* - Designated in P. L. 100-459 in sub-sections (a), (c), (h), (k), and (l) respectively.

** - Designated in P. L. 100-459 in sub-section (i).

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Economic Development Administration

Account Title: Economic development assistance programs

Account ID Code: 06-05-2050-452-A

Source: P. L. 101-162

Program, project, activity	Guaranteed Loan Limitations	
	Base	Sequester
1. Economic development assistance programs	$187,500	0

Page 1 of 2

PROGRAM, PROJECT, ACTIVITY DETAIL

($000)

Agency: Department of Commerce - International Trade Administration

Account Title: Operations and Administration

Account ID Code: 06-25-1250-376-A

Source: Conference Report 101-299, House Report 101-173,
Senate Report 101-144

Program, Project, Activity	Budgetary Resources	
	Base	Sequester
1. Trade Development (BA)		
A. Management & Policy Coordination...... .	1,603	22
B. Sectoral Analysis.......................	32,175	432
(1) Textiles and Apparel office operating expenses................	[2,550]	[34]
(2) Tailored Clothing Technology Corporation......................	[3,360]	[45]
(3) Textile Information Management System...........................	[600]	[8]
(4) Textiles and Apparel Export Promotion Program.................	[600]	[8]
(5) New Materials Center.............	[3,000]	[40]
C. Trade Information and Analysis..........	8,552	115
D. Trade Adjustment Assistance.............	4,605	62
Subtotal Trade Development........	46,935	631
2. International Economic Policy		
A. Management and Policy Coordination......	3,365	45
B. Regional Economic Policy................	13,849	186
(1) Canada FTA, Chapter 18 panels.....	[500]	[7]
Subtotal, International Economic Policy........................	17,214	231

(continued)

Page 2 of 2

PROGRAM, PROJECT, ACTIVITY DETAIL

($000)

Agency: Department of Commerce - International Trade Administration

Account Title: Operations and Administration (continuation)

Account ID Code: 06-25-1250-376-A

Source: Conference Report 101-299, House Report 101-173,
Senate Report 101-144

Program, Project, Activity	Budgetary Resources	
	Base	Sequester
3. Import Administration		
A. Import Administration..................	19,715	265
B. Special Import Programs................	941	13
Subtotal, Import Administration...	20,656	278
4. U.S. and Foreign Commercial Service		
A. Field Operations Management............	9,734	131
B. Export Promotion Services..............	10,880	146
C. Domestic Operations....................	20,520	276
D. Foreign Operations.....................	55,357	744
(1) Overseas Field Support...........	[6,000]	[81]
Subtotal, U.S. Foreign Commercial Service.......................	96,491	1,297
Total, Operations and Administration-Direct..........	181,296	2,437
5. Reimbursable Program-(401c Collection).......	15,960	223
TOTAL, Operations and Administration.................	197,256	2,660

[Non-add]

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Bureau of Export Administration

Account Title: Operations and Administration

Account ID code: 06-30-0300-376-A

Source: Conference Report 101-299 to accompany HR 2991
and Senate Report 101-144

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
1. Management & Policy Coordination (BA)....	2,583	36
2. Export Administration	22,286	310
A. Office of Foreign Availability.......	[793]	[11]
B. Regional Field Offices...............	[225]	[3]
C. COCOM Representative.................	[150]	[2]
3. Export Enforcement	15,241	212
4. Industrial Resource Administration	1,890	26
Total, Operations and Administration........................	42,000	584

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL

($000)

Agency: Department of Commerce, Minority Business Development Agency

Account Title: Minority Business Development

Account ID Code: 06-40-0201-376-A

Source: 1990 Congressional Justifications, Senate Report 101-144

	Budgetary Resources	
Program, project, activity	Base	Sequester
Total Budget Authority	39,741	0

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce, United States Travel and Tourism Administration

Account Title: Salaries and Expenses

Account ID code: 06-44-0700-376-A

Sources: Conference Report 101-299, Senate Report 101-144, Congressional Justifications, P.L. 101-162

Program, project, activity	Budgetary Resources	
	Base	Sequester
1. Int'l tourism dev. (BA)	$ 12,355	$ 154
2. [Representation expenses abroad]	[12]	[0]
3. Executive direction (BA)	1,945	24
Total, direct program.	14,300	178
4. Offsetting collections (401c)	1,500	20
Total	15,800	198

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Operations, Research and Facilities

Account ID Code: 06-48-1450-306-A

Source: Senate Report 101-144; Conference Report 101-299

	Budgetary Resources	
Program, project, activity	Base	Sequester
Total Budget Authority	1,269,607	0
Offsetting Collections (401c-Collection)	11,434	160
Total	1,281,041	160

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Coastal Energy Impact Fund

Account ID Code: 06-48-4315-452-A

Source: Appendix to the Budget of the United States Government for Fiscal Year 1990

Program, project, activity	Budgetary Resources Base	 Sequester
Coastal energy impact fund (401C-Collection)	5,200	73
Total	5,200	73

Note: The effect of the sequester is a reduced funding source for Operations, research and facilities.

Date: [illegible]

Page 1 of 2

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Federal Ship Financing Fund

Account ID Code: 06-48-4417-376-A

Source: Appendix to the Budget of the United States Government for Fiscal Year 1990

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
Fisheries financial support services (401C-Collection)	7,300	102
Total	7,300	102

Date: [illegible]

Page 2 of 2

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Federal Ship Financing Fund

Account ID Code: 06-48-4417-376-A

Source: Appendix to the Budget of the United States Government for Fiscal Year 1990

Program, project, activity	Guaranteed Loan Limitation Base	Guaranteed Loan Limitation Sequester
Fishing vessel obligations guarantee program (guaranteed loan limitation)	480,000	6,720
Total	480,000	6,720

Date:

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Fishing Vessel and Gear Damage Compensation Fund

Account ID Code: 06-48-5119-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
Fishing vessel and gear damage compensation fund (BA)	1,000	0
Total	1,000	0

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Fishermen's Contingency Fund

Account ID Code: 06-48-5120-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Sequester
Fishermen's contingency fund (BA)	736	2
Total	736	2

Date: JAN 3 1990

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Foreign Fishing Observer Fund

Account ID Code: 06-48-5122-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources	
	Base	Sequester
Foreign fishing observer fund (BA)	1,986	23
Total	1,986	23

Date:

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Fisheries Promotional Fund

Account ID Code: 06-48-5124-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	 Sequester
Fisheries promotional fund (BA)	2,000	0
Total	2,000	0

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Promote and Develop Fishery Products and Research Pertaining to American Fisheries

Account ID Code: 06-48-5139-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	 Sequester
Promote and develop fishery products and research pertaining to American fisheries (401c)	4,935	47
Total	4,935	47

Date:

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-National Oceanic and Atmospheric Administration

Account Title: Aviation Weather Services Program

Account ID Code: 06-48-8105-306-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
Aviation weather services program (BA)	30,000	417
Total	30,000	417

Date:

Page 1 of 1

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce-Patent and Trademark Office

Account Title: Salaries and Expenses

Account ID code: 06-51-1006-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	 Sequester
1. Patent Process		
A. Examination-professional	$112,394	$1,217
B. Examination-clerical	21,529	206
C. Appeals & Interferences	5,983	57
D. Patent printing	18,919	182
2. Trademark Process		
A. Examination of trademarks	15,315	214
B. Trial and Appeal Board	1,868	26
C. Trademark printing	837	12
3. Information Dissemination		
A. Customer services	13,364	113
B. Publication services	4,463	41
C. Data & document retrieval systems	33,180	307
4. Executive Direction and Administration		
A. Commissioner	759	0
B. Solicitor	1,643	16
C. Legislation & international affairs	1,686	0
D. Management planning	5,635	6
E. Administrative services	2,838	0
F. Automation	24,318	112
G. Quality review	1,201	11
Total	265,932	2,520

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - Technology Administration

Account Title: Salaries and Expenses

Account ID Code: 06-53-1100-376-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
1. Executive Direction	813	5
2. Technology Policy and Commercial Technology Application	3,087	20
Total Budget Authority (BA)	3,900	25

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - National Technical Information Service

Account Title: Information Products and Services

Account ID Code: 06-53-8546-376-A

Source: Appendix to the Budget of the United States Government for Fiscal Year 1990

Program, project, activity	Budgetary Resources	
	Base	Sequester
1. Information products and services (401c)	50,000	700
Total	50,000	700

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Account Title: Scientific and Technical Research and Services

Account ID Code: (06-52-0500-376-A)

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources	
	Base	Sequester
1. Measurement and Engineering Research and Standards (BA):		
A. Measurement Research and Standards		
(1) Fundamental physical measurements and standards	$19,893	215
(2) Radiation measurements and standards	6,001	65
(3) Analytical chemical measurements and standards	4,308	47
(4) Chemical properties and processes	11,679	126
Subtotal	41,881	453
B. Materials Science and Engineering		
(1) Materials characterization	10,333	112
(2) Metallurgy and metals processing	4,681	50
(3) Polymer and ceramics science	8,296	90
Subtotal	23,310	252
C. Engineering Measurements and Standards		
(1) Electronics and electrical measurements	16,172	175
(2) Mathematical sciences	5,560	61
(3) Manufacturing research and standards	6,301	68
(4) Fire and building safety research	9,372	102
Subtotal	37,505	406

(Continued)

Page 2 of 2

.gency: DEPARTMENT OF COMMERCE
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Account Title: Scientific and Technical Research and Services
(continuation)

Account ID Code: (06-52-0500-376-A)

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
D. Computer Sciences and Technology	9,543	103
E. Industrial Technology Services		
(1) Industrial technology services	26,260	284
(Advanced technology program)	[10,000]	[108]
(State extension services)	[1,300]	[14]
(Manufacturing Tech. Centers)	[7,500]	[81]
Subtotal	26,260	284
F. Research Support Activities		
(1) Technical competence program	6,989	76
(2) Research associate program	2,886	31
(3) Computing support	5,919	64
(4) Facilities modifications and improvements	2,260	24
(5) Special facilities: Cold neutron facility	6,517	71
Subtotal	24,571	266
TOTAL, STRS	163,070	1,764
Working Capital Fund (Budget Authority)	539	0
Total, NIST	163,609	1,764

PROGRAM PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - National Telecommunications and Information Administration

Account Title: Salaries and Expenses

Account ID code: 06-60-0550-376-A

Source: P.L. 101-162 and Senate Report 101-144

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
1. Domestic and International Policies (BA):		
A. Domestic Policies	$ 876	$ 12
B. International Policies	1,632	23
2. Spectrum Management:		
A. Spectrum Plans & Policies	1,661	23
B. Spectrum Management, Analysis & Operations	6,529	91
3. Telecommunication Sciences Research:		
A. Spectrum Research & Analysis	1,797	25
B. Systems Networks Research & Analysis	1,705	24
High Definition Television Studies	[250]	[3]
Total, NTIA	$14,200	$198

PROGRAM, PROJECT, ACTIVITY DETAIL
($000)

Agency: Department of Commerce - National Telecommunications and Information Administration

Account Title: Public Telecommunications Facilities, Planning and Construction

Account ID code: 06-60-0551-503-A

Source: Conference Report 101-299

Program, project, activity	Budgetary Resources Base	Budgetary Resources Sequester
Total Budget Authority	20,000	0

25-Jan-90
Total

Summary of Requirements by Object Class
(Dollar amounts in thousands)

		Accounts in 1990 or 1991 Appropriations Bills					All Accounts		
		1989 Actual	1990 Estimate	1991 Base	1991 Estimate	Increase/ Decrease	1989 Actual	1990 Estimate	1991 Estimate
Employment:									
	Full-time permanent positions	23,931	26,301	26,887	28,233	1,346	29,456	32,412	34,370
	Full-time equivalent employment	33,527	77,689	29,808	30,822	1,014	40,123	84,349	37,507
Obligations by Object Class:									
Personnel Compensation:									
11.1	Full-time permanent positions	867,059	892,997	935,976	955,840	19,864	1,059,035	1,129,233	1,192,172
11.3	Positions other than full-time permanent	140,195	759,524	122,521	123,736	1,215	169,741	791,292	155,439
11.5	Other personnel compensation	45,599	68,721	41,932	48,372	6,440	52,815	78,180	57,652
11.8	Special personnel services payments	329	100	100	100	0	329	100	100
	Total	1,053,182	1,721,342	1,100,529	1,128,048	27,519	1,281,920	1,998,805	1,405,363
Other objects:									
12	Personnel benefits	170,936	236,099	193,525	200,976	7,451	207,952	281,662	246,668
13	Benefits for former personnel	12,130	77,728	11,078	15,304	4,226	12,774	78,466	16,029
21	Travel and transportation of persons	57,500	137,451	40,317	43,246	2,929	73,497	157,234	62,804
22	Transportation of things	10,219	24,989	9,736	11,381	1,645	13,455	29,516	15,840
23.1	Rental payments to GSA	83,575	86,340	90,756	96,473	5,717	123,983	136,335	146,621
23.2	Rental payments to others	32,719	95,118	38,398	39,001	603	37,124	100,116	43,666
23.3	Communications, utilities, and misc. charges	81,308	183,182	88,601	101,107	12,506	105,875	213,252	131,969
24	Printing and reproduction	107,024	52,431	51,437	58,062	6,625	121,511	69,635	75,265
25	Other services	703,862	744,153	610,833	698,553	87,720	875,095	969,140	917,020
26	Supplies and materials	76,522	76,165	69,943	79,074	9,131	99,564	106,412	109,272
31	Equipment	80,874	80,899	69,277	130,761	61,484	110,535	118,337	174,174
32	Lands and structures	6,123	3,197	1,920	14,169	12,249	6,425	3,428	14,421
33	Investments and loans	0	0	0	0	0	9,256	24,397	12,430
41	Grants, subsidies, and contributions	400,829	448,375	409,405	170,506	(238,899)	421,488	478,446	188,906
42	Insurance claims and indemnities	1,509	1,669	2,041	2,041	0	1,521	1,682	2,054
43	Interest and dividends	137	21	21	21	0	22,813	18,026	13,026
44	Refunds	0	0	0	0	0	1,165	1,997	1,440
92	Undistributed	251	0	0	0	0	251	0	0
	Transfer of NBS working capital fund	0	0	361	0	(361)	0	0	0
	Total Obligations	2,878,700	3,969,159	2,788,178	2,788,723	545	3,525,804	4,786,436	3,576,968
	Fee collections				(241,420)				
	Financing				(6,000)				
	Transfers				(60,128)				
1991 Appropriation Request					2,481,175				

DEPARTMENT OF COMMERCE
SUMMARY OF CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
General Administration:			
Consulting services..	79	330	505
Management and professional services............................	190	200	200
Special studies and analyses....................................	0	0	0
Management and support services for research and development....	0	0	0
Total...	269	530	705
Bureau of the Census:			
Consulting services..	3,426	907	712
Management and professional services............................	5,555	5,551	1,125
Special studies and analyses....................................	155	742	888
Management and support services for research and development....	0	0	0
Total...	9,136	7,200	2,725
Economic and Statistical Analysis:			
Consulting services..	63	25	40
Management and professional services............................	209	195	195
Special studies and analyses....................................	0	25	25
Management and support services for research and development....	0	0	0
Total...	272	245	260
Economic Development Administration:			
Consulting services..	43	75	0
Management and professional services............................	0	0	0
Special studies and analyses....................................	0	0	0
Management and support services for research and development....	0	0	0
Total...	43	75	0

Mr. SMITH. We have with us today the Secretary of Commerce, the Honorable Robert Mosbacher. How do you want to proceed?

Secretary MOSBACHER. Mr. Chairman, I would just as soon go right ahead with the budget and your questions, sir, unless you particularly want me to read a statement.

Mr. SMITH. We will put your statement in the record and proceed, if that is what you want.

Secretary MOSBACHER. If you would put my statement in the record, I would appreciate it.

Mr. SMITH. All right.

[The statement of Secretary Mosbacher follows:]

	1989 Actual	1990 Estimate	1991 Estimate
International Trade Administration:			
Consulting services	50	0	0
Management and professional services	28	28	28
Special studies and analyses	69	50	0
Management and support services for research and development	0	0	0
Total	147	78	28
Bureau of Export Administration:			
Consulting services	55	60	70
Management and professional services	0	0	0
Special studies and analyses	192	0	0
Management and support services for research and development	0	0	0
Total	247	60	70
Minority Business Development Agency:			
Consulting services	27	82	0
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total	27	82	0
United States Travel and Tourism Administration:			
Consulting services	67	0	0
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total	67	0	0
National Oceanic and Atmospheric Administration:			
Consulting services	203	870	645
Management and professional services	28	57	47
Special studies and analyses	4,489	6,436	6,506
Management and support services for research and development	66	68	68
Total	4,786	7,431	7,266

	1989 Actual	1990 Estimate	1991 Estimate
Patent and Trademark Office:			
Consulting services	0	10	10
Management and professional services	43	30	30
Special studies and analyses	0	15	15
Management and support services for research and development	0	0	0
Total	43	55	55
Technology Administration:			
Consulting services	0	71	25
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total	0	71	25
National Institute of Standards & Technology:			
Consulting services	17	18	19
Management and professional services	551	665	685
Special studies and analyses	45	36	0
Management and support services for research and development	0	0	0
Total	613	719	704
National Telecommunications and Information Administration:			
Consulting services	59	52	52
Management and professional services	0	0	0
Special studies and analyses	20	15	15
Management and support services for research and development	0	0	0
Total	79	67	67
Total, Department of Commerce:			
Consulting services	4,089	2,500	2,078
Management and professional services	6,604	6,726	2,310
Special studies and analyses	4,970	7,319	7,449
Management and support services for research and development	66	68	68
Total	15,729	16,613	11,905

THE OFFICE OF THE INSPECTOR GENERAL'S STATEMENT OF CONSULTING SERVICES AS REQUIRED BY TITLE 31 U.S.C. SECTION 1114(b)

The Office of Inspector General reviewed consulting services contract data reporting at three Department of Commerce procurement offices. Overall, consulting services contract data reported to the Federal Procurement Data System was understated by about $19 million for a 21 month period ending June 30, 1988. Reporting problems were caused partly because the Federal Procurement Data System is not structured to track advisory and assistance contract data in the same manner as the Department's system. The Department's system records and tracks consulting services by product or service code. These codes are converted to yes or no codes for the FPDS.

However, the Department needed to improve controls over reporting the data to its own system. Data in the Commerce system was not accurate and complete due to inadequate controls over data preparation, entry, and verification.

We recommended that procurement personnel receive training in data preparation and entry, and that contracting officers do a better job verifying the data before it is entered. We also recommended that procurement staffs verify data after entry in the FPDS to ensure accuracy and completeness. The Bureaus implemented all our recommendations and the Department added edits to the Commerce system which improved the automatic classification of consulting services and eliminated the need for manual verification.

DEPARTMENT OF COMMERCE
SUMMARY OF PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
General Administration:				
Periodicals	1,420	1,398	1,384	1,488
Pamphlets	27	15	12	12
Audiovisuals	0	0	0	0
Total	1,447	1,413	1,396	1,500
Bureau of the Census:				
Periodicals	372	337	354	371
Pamphlets	2,175	4,804	4,200	3,200
Audiovisuals	54	43	40	38
Total	2,601	5,184	4,594	3,609
Economic and Statistical Analysis:				
Periodicals	156	140	152	162
Pamphlets	14	16	35	35
Audiovisuals	3	3	4	4
Total	173	159	191	201
Economic Development Administration:				
Periodicals	0	0	0	0
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	0	0	0	0
International Trade Administration:				
Periodicals	258	304	320	340
Pamphlets	1,338	1,571	1,580	1,590
Audiovisuals	10	10	10	10
Total	1,606	1,885	1,910	1,940

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Bureau of Export Administration:				
Periodicals	48	67	70	70
Pamphlets	20	29	30	30
Audiovisuals	0	0	0	0
Total	68	96	100	100
Minority Business Development Agency:				
Periodicals	35	40	40	40
Pamphlets	28	52	52	52
Audiovisuals	0	0	0	0
Total	63	92	92	92
United States Travel and Tourism Administration:				
Periodicals	0	0	0	0
Pamphlets	206	400	313	332
Audiovisuals	0	0	0	0
Total	206	400	313	332
National Oceanic and Atmospheric Administration:				
Periodicals	713	695	797	713
Pamphlets	248	421	431	436
Audiovisuals	117	48	202	205
Total	1,078	1,164	1,430	1,354
Patent and Trademark Office:				
Periodicals	73	48	69	74
Pamphlets	29	41	44	47
Audiovisuals	6	5	7	7
Total	108	94	120	128

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Technology Administration				
Periodicals	0	0	5	5
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	0	0	5	5
National Institute of Standards & Technology				
Periodicals	14	8	12	12
Pamphlets	17	10	25	25
Audiovisuals	4	23	0	0
Total	35	41	37	37
National Telecommunications and Information Administration:				
Periodicals	0	0	0	0
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	0	0	0	0
Total, Department of Commerce:				
Periodicals	3,089	3,037	3,203	3,275
Pamphlets	4,092	7,359	6,722	5,759
Audiovisuals	204	132	263	264
Total	7,385	10,528	10,188	9,298

PREPARED STATEMENT BY ROBERT A. MOSBACHER
SECRETARY OF COMMERCE

BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
MARCH 1, 1990

MR. CHAIRMAN, MR. ROGERS, AND MEMBERS OF THE SUBCOMMITTEE, TODAY I PRESENT TO YOU THE DEPARTMENT OF COMMERCE'S BUDGET REQUEST FOR FISCAL YEAR 1991 -- A TOTAL OF $2.5 BILLION. THE REQUEST FOR 1991 IS $1 BILLION LESS THAN THE DEPARTMENT'S 1990 REQUEST BECAUSE THE PEAK ACTIVITIES FOR THE 1990 DECENNIAL CENSUS WILL BE OVER BY THEN.

DURING MY FIRST YEAR AT COMMERCE, THE DEPARTMENT HAS SCRUTINIZED ITS GOALS VERY CLOSELY. IN PARTICULAR, WE HAVE TAKEN HEED OF AMERICA'S SITUATION IN THE LAST DECADE OF THE TWENTIETH CENTURY AND TRIED TO LOOK AHEAD TO HER PLACE IN THE TWENTY-FIRST CENTURY.

THE PRE-EMINENT ASPECT OF THE CURRENT SITUATION, FOR COMMERCE AND ITS PROGRAMS, IS THAT AMERICA'S TRADE POSITION AND TECHNOLOGICAL SUPREMACY ARE UNDER CHALLENGE. OUR COMPETITORS ARE AGGRESSIVELY PURSUING THEIR OWN INTERESTS IN THE GLOBAL MARKETPLACE. TO COMPETE SUCCESSFULLY, THE UNITED STATES MUST OFFER THE BEST

PRODUCTS AND SERVICES AT THE LOWEST COSTS. AMERICA'S BUSINESSES MUST DO "THE RIGHT THING RIGHT THE FIRST TIME."

PRESIDENT BUSH SAID IT WELL IN THE STATE OF THE UNION ADDRESS. HE SAID:

"IN THE TOUGH COMPETITIVE MARKETS AROUND THE WORLD, AMERICA FACES GREAT CHALLENGES AND GREAT OPPORTUNITIES. AND WE KNOW THAT WE CAN SUCCEED IN THE GLOBAL ECONOMIC ARENA OF THE '90S, BUT TO MEET THAT CHALLENGE WE MUST MAKE SOME FUNDAMENTAL CHANGES -- SOME CRUCIAL INVESTMENT IN OURSELVES."

WE KNOW WHAT IS REQUIRED. THE NATION MUST PROVIDE HIGHER QUALITY PRODUCTS AND SERVICES. WE MUST MAKE THE MOST OF HUMAN RESOURCES THROUGH GREATER EDUCATIONAL OPPORTUNITIES. LEGAL BARRIERS THAT IMPEDE OUR INDUSTRIES' COMPETITIVENESS MUST COME DOWN. WE MUST ENCOURAGE COMPANIES TO TAKE THE LONG VIEW BY DECREASING THE COST OF CAPITAL. NEW TECHNOLOGIES MUST REACH THE MARKETPLACE SOONER. MORE OF THE GOVERNMENT'S $70 BILLION ANNUAL INVESTMENT IN RESEARCH AND DEVELOPMENT MUST YIELD COMMERCIAL PRODUCTS. ENVIRONMENTAL GOALS AND COMPETITIVE GOALS NEED TO GO HAND IN HAND. WE MUST PROMOTE FREE TRADE AND ENCOURAGE MARKET-BASED ECONOMIES AROUND THE WORLD.

At Commerce, we have built our 1991 request around this assessment of America's present and our strategy for her future.

TRADE

Fighting unfair foreign trade barriers is a top priority within Commerce's program. Additional staff will allow the International Trade Administration to process complex unfair trade cases, enforce steel agreements, support efforts to negotiate fair steel trading practices, and increase U.S. participation in the economies of eastern Europe and the Soviet Union. The International Trade Administration has already set up an eastern Europe business information center as the government's clearinghouse for trade and investment information. The United States and Foreign Commercial Service will also increase its presence in eastern Europe. We will beef up our trade promotion efforts.

Expanding overseas markets for American goods and services is another high priority. I believe that an adequately staffed sales force is the best way to promote U.S. exports. Additional resources for the International Trade Administration will bolster American efforts to take advantage of the single European market, to seize the opportunities offered by the U.S.-Canada free trade agreement, and to compete successfully around the Pacific rim. For the first time in many years, the 1991 request includes appropriated funding for the United States Travel and Tourism Administration to work with industry to promote travel to the United States.

COMPETITIVENESS

During the coming year, the Department will assess the proper deployment of the foreign and domestic staff of the United States Foreign and Commercial Service. The 1991 budget provides the resources for more balanced deployment of the domestic staff and includes a substantial increase for expansion of the Foreign Commercial Service staff in Japan, the Pacific rim, and eastern Europe. We intend to put the money where the return is the greatest.

Additional resources for the Bureau of Export Administration will support an export control program that safeguards national security without needlessly restricting exports. The 1991 request includes funds for exporter assistance staff in New England, Portland, and northern California. The Bureau will also be able to review the list of controlled commodities more

FREQUENTLY AND HELP EXPORTERS DETERMINE CORRECT COMMODITY CLASSIFICATIONS.

AMERICAN INDUSTRY CANNOT COMPETE IN THE GLOBAL MARKET WITHOUT HIGH QUALITY PRODUCTS. FOR THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, THE PRESIDENT HAS HIGHLIGHTED RESEARCH IN ROBOTICS, SUPERCONDUCTIVITY, SEMICONDUCTORS, CHEMICAL PROCESSES AND OTHER AREAS. BESIDES ADDING SUBSTANTIAL RESOURCES IN CORE RESEARCH PROGRAMS, THE DEPARTMENT'S REQUEST CONTINUES PROGRAMS TO FOSTER THE FORMATION OF CONSORTIA TO DO GENERIC, PRE-COMPETITIVE RESEARCH INTO PROMISING TECHNOLOGIES AND TO ESTABLISH REGIONAL CENTERS TO TRANSFER ADVANCED MANUFACTURING TECHNOLOGIES TO MEDIUM AND SMALL-SIZED BUSINESSES.

PROMPT EXAMINATION AND REGISTRATION OF PATENT AND TRADEMARK APPLICATIONS AND DISSEMINATION OF INFORMATION ARE OTHER WAYS COMMERCE CAN SUPPORT AMERICA'S BUSINESSES IN GLOBAL COMPETITION. DURING 1989, THE DEPARTMENT ACHIEVED ITS LONG-STANDING GOAL OF PROCESSING PATENT APPLICATIONS WITHIN AN AVERAGE OF 18 MONTHS. WE HAD ALREADY ACHIEVED OUR GOAL IN THE TRADEMARK AREA. WE ARE NOT COMPLACENT, HOWEVER. THE INCREASING NUMBER OF PATENT APPLICATIONS DICTATES THAT WE INCREASE THE STAFF OF THE PATENT AND TRADEMARK OFFICE TO MAINTAIN 18 MONTH PENDENCY. WE ARE ALSO CONTINUING EFFORTS TO INSTALL THE AUTOMATED PATENT SYSTEM, WHICH

WILL ULTIMATELY REDUCE OUR DEPENDENCE ON PAPER FILES AND CONTRIBUTE TO HIGHER QUALITY PATENT EXAMINATIONS.

ECONOMIC STATISTICS

KNOWING WHERE WE STAND AMONG THE WORLD'S ECONOMIES AND UNDERSTANDING HOW OUR ECONOMY IS FUNCTIONING ARE CRITICAL TO SUCCESSFUL COMPETITION. THE 1991 REQUEST INCLUDES ADDITIONAL FUNDS TO CARRY OUT THE PRESIDENT'S COMMITMENT TO IMPROVE OUR ECONOMIC STATISTICS. THIS WILL INCLUDE MAINTAINING THE QUALITY OF THE GROSS NATIONAL PRODUCT AND BALANCE OF PAYMENTS ACCOUNTS AND IMPROVING INTERNATIONAL INVESTMENT DATA. NEW FUNDS WILL ALSO GO TOWARDS COLLECTING BETTER DATA ON SERVICE INDUSTRIES, ON UNEMPLOYMENT, AND ON THE EFFECTS OF FEDERAL PROGRAMS ON HOUSEHOLDS AND INDIVIDUALS.

DECENNIAL CENSUS

FOR DEMOGRAPHIC DATA, THE DECENNIAL CENSUS IS THE NATION'S CHIEF SOURCE. AS YOU KNOW, THE ACTIVITIES OF THE 1990 DECENNIAL CENSUS ARE APPROACHING THEIR PEAK. A MAJOR CONCERN IS THAT THE RECENT CONGRESSIONAL CUTS OF $57.6 MILLION FROM THE PRESIDENT'S BUDGET ON TOP OF PREVIOUS CUTS AND COST ABSORPTIONS MIGHT COMPROMISE OUR ABILITY TO CONDUCT A FULL AND FAIR CENSUS. IN PARTICULAR, WE

CONTEMPLATED MAKING THE VACANT/DELETE CHECK CONTINGENT UPON THE MAIL RESPONSE RATE. WE HAVE RESOLVED DEFINITELY, HOWEVER, TO PROCEED WITH THE VACANT/DELETE CHECK AS ORIGINALLY PLANNED. IF THE MAIL RETURN SUBSTANTIALLY EXCEEDS WHAT WE HAVE USED AS OUR PLANNING BASE, IT WILL BE POSSIBLE TO PROCEED WITHIN THE CURRENTLY APPROPRIATED AMOUNT. OTHERWISE, WE INTEND TO PROPOSE A DIRE EMERGENCY SUPPLEMENTAL APPROPRIATION WITH OFFSETTING EXPENDITURE REDUCTIONS, IN LATE APRIL, WHEN WE WILL KNOW THE ACTUAL MAIL RETURN RATE AND THE AMOUNT OF MONEY NEEDED TO COMPLETE THE CENSUS. WE WILL CAREFULLY MONITOR THE MAIL RETURN RATE AND KEEP THE COMMITTEE APPRISED. OF COURSE, OTHER TOTALLY UNANTICIPATED SETBACKS, SUCH AS A NATURAL CALAMITY, MAY NECESSITATE A SUPPLEMENTAL. I UNDERSTAND THAT SUPPLEMENTAL APPROPRIATIONS HAVE BEEN USED DURING THE DECENNIAL CENSUS YEAR AS REQUIRED BY EVENTS.

GLOBAL ECONOMICS -- GLOBAL ENVIRONMENT

WITH EACH PASSING YEAR IT BECOMES MORE APPARENT THAT ALL HUMAN ACTIVITY, INCLUDING OUR ECONOMIC EFFORTS, MUST TAKE INTO ACCOUNT THE NATURAL ENVIRONMENT. COMMERCE'S PROGRAMS DEAL WITH ECONOMIC AND TRADE CONCERNS, AND WITH THEIR ENVIRONMENTAL EFFECTS. THE DEPARTMENT IS A MAJOR PARTICIPANT IN A GOVERNMENTWIDE INVESTIGATION OF GLOBAL CLIMATE CHANGE, FOR WHICH THE PRESIDENT

IS PROPOSING MORE THAN $1 BILLION IN 1991. WE ARE ASKING FOR ADDITIONAL RESOURCES SO THAT THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION CAN CARRY OUT ITS VITAL ROLE IN MONITORING AND CONDUCTING RESEARCH ON CLIMATE CHANGE. THE RESEARCH RESULTS WILL FORM THE BASIS FOR ECONOMIC AND ENVIRONMENTAL POLICY ON NATIONAL AND INTERNATIONAL LEVELS.

THE 1991 REQUEST ALSO INCLUDES INCREASED SUPPORT FOR RESEARCH AND INVESTIGATION OF THE COASTAL OCEANS. WE ARE ALSO ASKING FOR FUNDING FOR THE COASTAL ZONE MANAGEMENT PROGRAM AND THE NATIONAL SEA GRANT COLLEGE PROGRAM. THESE REQUESTS REFLECT IN PARTICULAR THE CONCERN THE PRESIDENT EXPRESSED DURING THE CAMPAIGN ABOUT THE COASTAL WATERS. IN TOTAL, I AM REQUESTING 35 PERCENT MORE FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION THAN THE LAST REAGAN BUDGET AND 10 PERCENT MORE THAN CONGRESS APPROPRIATED IN 1990.

DURING 1991, WE WILL MOVE AHEAD TO MODERNIZE THE NATIONAL WEATHER SERVICE SO THAT IT CAN SERVE THE NATION INTO THE NEXT CENTURY. WE WILL DEPLOY THE NEXT GENERATION RADARS AND REPLACE OUR WEATHER SATELLITES. WE WILL CONTINUE WORK ON SYSTEMS TO AUTOMATE COLLECTION AND PROCESSING WEATHER DATA. I CAN ASSURE YOU THAT WE WILL CLOSE EXISTING PUBLIC WARNING AND FORECAST STATIONS AS PART OF THE MODERNIZATION EFFORT ONLY IN ACCORDANCE WITH PUBLIC LAW

100-685. I will certify beforehand that closing stations will not degrade the current level of service.

MINORITY BUSINESS DEVELOPMENT AGENCY REINVIGORATION

Competing successfully in the global marketplace requires tapping the skills and creativity of all citizens. Another of my top priorities is to reinvigorate the Federal Government's assistance to minority businesses. The Department is requesting a 15 percent increase to upgrade and strengthen the Minority Business Development Agency's business development activities, strengthen the Agency's partnerships with state and local government, and improve agency management.

* * * * *

The Commerce budget is part of President Bush's plan to reduce the deficit without raising taxes, changing Social Security, weakening defense, or reducing benefits to the needy. I am proud to say that, even with the need to restrain spending, the Department is able to propose important initiatives in areas vital to the nation's security and well-being.

The Department believes that providing adequate funding to critical programs requires reducing or eliminating programs whose missions have been achieved, activities that the private sector or state and local governments can carry out, and programs that have proven ineffective or are of low priority given fiscal constraints. The Department also believes that reducing specific programs is preferable to continuing across-the-board reductions, cutting high-priority programs along with the rest.

To compete around the globe, the United States, and the federal government in particular, must allocate its resources carefully. We must fund the programs that can make a difference and discard those that have served their purpose. We must learn to live within our means. This budget demonstrates Commerce's commitment to those objectives. I know that you care as deeply as I do that the nation fare well in the global marketplace. I know from many discussions over the past year that this budget reflects many of your concerns, even if the amounts for individual programs are not what you might want. I look forward to working with you to ensure that Commerce's programs receive the funding that they deserve.

EASTERN EUROPE FUNDING INCREASE

Mr. **Smith.** Now you have a big increase in here, a substantial increase, for Eastern Europe, and that is understandable. What can you tell us about this? Are you already shifting personnel in 1990, or is this something that is just going to happen next fiscal year?

Secretary **Mosbacher.** We are already shifting personnel. We are reopening an office in Czechoslovakia, where frankly we closed the Foreign Commercial Service office quite a few years ago because there was a lot of harrassment of our people. It has changed so tremendously that now everyone is anxious we open there.

We will put TDY or temporary duty people in there immediately, and we have started someone in language training as the Foreign Commercial Service officer. We will have some nationals in there, too. I was over there the other day. I talked to the Ambassador about space.

So Czechoslovakia will be the largest change, because we had actually closed there. We will be adding personnel both in Poland and Hungary, and I suspect eventually in some of the other countries, too.

Mr. **Smith.** Where are these personnel coming from? Where are you taking them from?

Secretary **Mosbacher.** Some of them have been in other sections of the Foreign Commercial Service, but Susan Schwab, Assistant Secretary Schwab, is probably here. She is not here? We can give you just where they came from, but some of them were here in the Washington office, some of them were in other areas.

Mr. **Smith.** Are they people that need to go back to those locations, or can they just permanently stay in Eastern Europe?

Secretary **Mosbacher.** In some cases we are just adding to people who are already there. For instance, in Poland we already have a very good office. We will just add to it, and Hungary also. Czechoslovakia is the big change because it is reopening itself.

Mr. **Smith.** Yes. Well, it kind of concerns some of us because if you are taking them from the field offices. The field offices are pretty important in every State, and they already don't have very many people in most of those field offices.

Secretary **Mosbacher.** We are adding a total, as you know—our budget is up what, $7.95 million?

Mr. **Brown.** Yes.

Secretary **Mosbacher.** And we are adding a total of 107 people to the U.S. Foreign Commercial Service offices, all of them in the field rather than in here. Isn't that correct?

Mr. **Brown.** There are none on the domestic side.

Secretary **Mosbacher.** None on the domestic side.

NOMINATION OF NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY UNDER SECRETARY

Mr. **Smith.** Okay. Now with regard to the National Institute of Standards and Technology, you still don't have a head for that?

Secretary **Mosbacher.** We have recommended to the President an Under Secretary of Technology——

Mr. **Smith.** I am wrong. You do have one for NIST, Mr. Lyons.

Secretary **Mosbacher.** Oh, I'm sorry.

NOMINATION OF UNDER SECRETARY FOR TECHNOLOGY ADMINISTRATION

Mr. SMITH. You do have one for NIST, Dr. Lyons, so what about the Under Secretary of Technology?

Secretary MOSBACHER. Well, I knew that is what you meant. [Laughter.]

We recommended one to the President, and going through a combination of White House, FBI, getting his own affairs in order, I would hope that he would be announced shortly. Thirty to forty days is our best guesstimate here.

Mr. SMITH. Meanwhile, most of those staff who would be reporting to him are currently reporting to others, and so I wonder why you don't think that should be a permanent situation. We have gotten along this long without him. What is the situation?

Secretary MOSBACHER. Oh, I think we need him a great deal. Deputy Secretary Murrin fortunately has a very strong background, also, in technology, but there is an awful lot to be done in that area.

Tom, do you want to add a little to that?

Mr. SMITH. Well, and while you are at it, cover this: Should these external technology programs be under the new Under Secretary instead of NIST?

Mr. MURRIN. Well, what we are doing, Mr. Chairman, is essentially debugging an evolving new organization, as you know. The Under Secretary position did not exist at all before. The Technology Administration organization, as it is now planned and evolving, is quite different. The relationship with NIST is different.

As the Secretary just suggested, I have been spending much of my time, essentially on an ad hoc basis, coordinating the key people involved. We are very confident, sir, that we really can justify fully that new position, and we really will have a very effective team, all of this aimed at helping you and others develop hard-hitting policies and procedures to enhance our global competitiveness, particularly relating to technology. So we are really evolving that, and we hope the new Under Secretary will be through this process successfully in the next 30 to 40 days.

NIST BUDGET INCREASE FOR EXTERNAL PROGRAMS

Mr. SMITH. Well, I know the Secretary is strong on this because we have talked about it, but there are new missions that are expected to be carried out in NIST or wherever, the so-called external programs rather than the core programs. I notice in your budget that you have a $33 million increase in core programs and only $4 million in external programs. That doesn't seem to—the $4 million is a cut, $4.6 million. That doesn't seem to line up with putting additional emphasis on this new mission.

Mr. MURRIN. While we are getting our jargon and data clarified here, let me mention that one of those new initiatives that we think you are interested in and supportive of is the Advanced Technology Program, where we have for the first time, as you know, $10 million. That process has well started, despite the absence of the Under Secretary, and we are hoping that we will be able to effectively commit those funds during this year, so that is a major new initiative underway.

Mr. **Smith**. Well, it is partly this signal, I think, that has caused some people in the authorizing committee to talk to me about the advisability of putting these external programs under the Under Secretary for Technology. Do you think that is advisable or not? Do you think they would get more attention there?

Mr. **Murrin**. Well, what we are doing—and I hope this is responsive—the Secretary is a great proponent of what he terms "collegiality," and I think by that he means we had better cooperate effectively together and use well our total resources. What we are finding is that we have tremendous expertise in present parts of the organization, some of them, somewhat disparate, frankly, in regard to how earlier programs were conducted. We are pulling those together, we think in a very promising and soon to be effective way.

Dr. Lyons, for example, who you met and I think were pleased with during his recent visit——

Mr. **Smith**. Right. I was.

Mr. **Murrin** [continuing]. Will have an office at headquarters and will be spending part of his time there to directly interface with us while he takes over his new responsibilities in Gaithersburg, and that is just one small but, we think, significant example of how we are teaming our people more effectively together.

Mr. **Smith**. Well, we are interested in this. As you know, going back 4 or 5 years ago, the people in the core programs have really not wanted the additional mission. Every time we try to start something new, they say, "That is coming off of us." That is not so. I mean, we need this additional mission. Then I saw these figures and they raised a red flag with me.

Secretary **Mosbacher**. Well, we agree with you, Mr. Chairman. As a matter of fact, we are looking at the figures. It may look, from your point, as if we are talking about a reduction from last year. Actually, we had asked for nothing last year and $15 million this year.

Mr. **Smith**. Yes, but we appropriated funds last year.

Secretary **Mosbacher**. Yes, and we went ahead and spent it, but this year this is our request. It depends on which side of the table you are looking at it from, but we consider it from our view a big increase.

Mr. **Smith**. Yes, yes.

Secretary **Mosbacher**. And we are dedicated to both the core and the outside efforts. We agree with you on that.

NOMINATION FOR ECONOMIC DEVELOPMENT ADMINISTRATION DIRECTOR

Mr. **Smith**. Now I want to ask about EDA. We still don't have a head for EDA. When are we going to get a director for EDA?

Mr. **Berman**. Mr. Chairman, Joyce Hampers has been nominated by the President, and we have been in contact with Chairman Hollings and I think that hearing date is pending—I'm sorry, Chairman Burdick, on a hearing date. It took so long because she had complex financial holdings that had to be reconciled.

Mr. **Smith**. I see. Do you think that will happen very soon now, or——

Mr. **Berman**. Yes, sir, we hope it will be very soon.

Mr. **Smith.** Well, I don't need to go into details here, but you have problems at EDA. You have had ever since you have been in office. They were kind of a runaway agency down there. I don't mind administrators who don't agree with the law but nevertheless administer the law, but I can't countenance people who not only don't like the law, but also decide they are not going to administer the law because they don't like it.

Of course you have had this vacancy, and you left a deputy in charge there who is just like the one that left, and it is getting to the point where it is intolerable. He not only defies the law, he is thumbing his nose at you. You are over him. You are the head honcho around here, you know, and we have to get this agency to doing what it is supposed to do. Do you agree?

Secretary **Mosbacher.** Yes, and we have a nominee who we have spent a lot of time discussing how to proceed with, and we think she will do a good job, assuming that she gets confirmed, which we have no reason to think she won't very soon.

Mr. **Smith.** Okay. I will have more questions, but I will yield to Mr. Rogers now.

Mr. **Rogers.** Thank you, Mr. Chairman.

Mr. Secretary, good to see you again.

Secretary **Mosbacher.** Good to see you, Mr. Rogers.

Mr. **Rogers.** Let me compliment you, first off here, on your efforts to bring Commerce to the table on a whole host of issues critical to the performance of our economy. The resources you have must be put to the best use, and in my view you have endeavored to do just that.

As the world switches from, or as America switches from, military preparedness to the new world of economic preparedness, and where national security is defined not in terms of your military prowess but of your economic prowess, you sit in the catbird's seat in the new world's picture. Not only is that a nice place to be, but of course it carries heavy responsibilities. I think you have presented us with a budget policy that, one, is more workable than we have had in the past and, two, reflects by and large, I think, the right priorities, so let me compliment you for a good start.

Secretary **Mosbacher.** Thank you, sir.

Mr. **Rogers.** The third paragraph in your prepared testimony was music to my ears. Our trade challenge is monumental. We need a strong sales force, and I am very pleased that you are seeking another 107 positions for the Foreign Commercial Service, which hasn't had enough hands on deck at the very time we need them, and I am very pleased that you have asked for those additional positions. Now I wonder if you could give us an idea of where those will be allocated around the world?

ALLOCATION OF RESOURCES FOR THE FOREIGN COMMERCIAL SERVICE

Secretary **Mosbacher.** Yes, sir. Japan and the Pacific Rim will account for 34 positions. East Europe will be 32. E.C., including our new office in Brussels, will be 30, and all other areas will be 11, a total of 107. We think that is important. It is important that we add to East Europe, but remember if you look at percentage of trade, although we want to make it grow and happen, the major part of our trade is Pacific Rim and E.C.

EASTERN EUROPE TRADE

Mr. Rogers. Well, it seems to me that given the customs in Japan and our long-time effort to break into that market, and the relative lack of success therein, and with this huge—the world's largest market, now, even in the old European Community nations, not to mention the new Eastern Bloc nations—with that huge new bloc coming onstream as a unified market with harmonized policies, it seems to me that has to be our highest and best opportunity to strike at the trade deficit, that is to say, Eastern and Central Europe. Would you agree with that?

Secretary Mosbacher. I think it is important as a market opening and as a future potential, but we have brought down our trade deficit in Western Europe, in the E.C. countries, to a slight surplus in 1989 for the first time, and we are talking about much bigger trade numbers than we will see in Eastern Europe for the next probably 10 to 20 years.

So I am not going to diminish Eastern Europe, but the whole rest of the world of course is of major importance. We are talking about the Pacific Rim being a tremendous opportunity for growth, and Japan for the first time—and I am a realist, so I am not claiming this is going to work—but they have put forth an import policy that will allow tax incentives to Japanese companies, for instance, a 5 percent tax credit for those who have incremental imports, new tariff reductions, new import offices around both their country and our country and other places in the world.

I think we have to make sure that we give our companies in this country every opportunity to export to Japan. Now at the end of another year we may find that it was all just rhetoric and work, but if that is true, we want to know where to put the blame: not on us; on them. If it does work, it can make a major difference in our trade deficit. Our trade deficit now is still right at $50 billion with Japan, and that amount equals over 45 percent of the total trade deficit because it has come down everywhere else and is now $108 billion overall.

So I agree that Eastern Europe is important, but not to the exclusion of any other area.

Mr. Rogers. Well, I guess the point I wanted to make was that it seems to me that dollar for dollar, we can probably get more bang for the buck on the trade deficit in E.C. than we can in Japan and the Far East, the Pacific Rim. At least that has been the history that we have had so far with Japan.

But I am glad to see people going to Japan. I remember in Osaka, at the office in Osaka, we had one Foreign Commercial Service officer. This is 2 or 3 years ago. I guess that is the second largest Japanese economy, and we had one person trying to hustle American goods down there, and fighting the State Department all the while.

Has that problem improved itself?

Secretary Mosbacher. Yes. Yes, and we talked about it when we were over there, too. As you will notice, we are increasing the officers by 6 and the foreign nationals by 10 in January, so we are going to push that.

FOREIGN COMMERCIAL SERVICE MINISTER—COUNSELORS

Mr. ROGERS. As I have mentioned, we have all had a chance to talk with many of your FCS people at posts around the world regarding the problem of commercial officers being hamstrung by the State Department personnel; it is something that has troubled me and other members of the subcommittee. I wonder, since you have changed the designation of the ranking FCS officer at eight of the posts to Minister-Counselor, how that has worked out so far?

Secretary MOSBACHER. Well, I think that having these Minister-Counselors has helped. We have eight, as you know. We think we need at least two more now, one for the newly opening office in Brussels for the E.C. and one in Seoul, Korea. It elevates them to equal level with other areas and gives them more access to the Ambassador, gives them more stature with both the governments and the private sector in these countries, and I think it is an important step for us.

I will say, though, that we are getting more cooperation now from the State Department than at any time I am familiar with, and I have talked to others that say it is a better relationship today than it has ever been in memory.

Mr. ROGERS. Good.

Secretary MOSBACHER. It is moving in the right direction, anyway.

Mr. ROGERS. You had a long way to go, but I am glad to see you are moving the right way. I hope you and Secretary Baker have more fishing trips together about that. [Laughter.]

Secretary MOSBACHER. We will do that. I am going to tell him that you recommend it.

Mr. ROGERS. What the doctor ordered, you understand.

ECONOMIC MARKETPLACE COMPETITION

As we enter this new era in the world of not military competition but economic marketplace competition, we are up against many competitors whose governments are so directly involved in their companies' business activities that it puts many of our companies at a great disadvantage, particularly with Japan but I suspect with others. Do we need to change the way we do business internationally vis-a-vis the involvement of the Government more in the international competition that we are up against?

Secretary MOSBACHER. Well, I think we need to be more cooperative between Government and business than we have ever been, and I think we are. We are sort of late starters in that game, but I think today business and labor and academia—but particularly the business field—are very comfortable in talking to us about some of the problems they run into trying to do business in other parts of the world.

We try to help them. You may have seen an article in the paper a few weeks ago where the President and the Vice President and the Secretary of State and the head of USTR, as well as myself, called or wrote—in my case, I happened to do both—our counterparts in two countries. I think we are getting to where, just as you say, that we have to be cooperative in this because it is one big, tough global marketplace. We are working toward it, and the President and this administration are very aware of it, and we are moving in that direction.

Mr. Rogers. Well, regarding one of the remnants of the era when the American consumer had to be protected from competing American companies, the antitrust law in today's world where the competition of GM is not Ford but Toyota or somebody else, a foreign national or a foreign company, do we need to relax or change our antitrust laws more, and are you going to be promoting that?

ANTITRUST LAWS

Secretary Mosbacher. Yes, we are, and I think the Administration is very much together on this now, and the President I think will be talking much more about it. We are talking about changing the antitrust laws to allow joint production, joint manufacturing, as well as joint R&D which had heretofore been true.

NATIONAL COOPERATIVE RESEARCH ACT

What is the name of the law?

Mr. Berman. That is the National Cooperative Research Act.

Secretary Mosbacher. Yes, the National Cooperative Research Act is the act that we will be pursuing which will allow joint production.

Mr. Rogers. Well, many of us believe we can't compete under present laws effectively in this new world market. I remember a couple of years ago or so, GE was wanting to develop the new, next generation jet engine. The cost involved in the research and the development of that engine was such that GE could not finance it itself. It was prohibited by American laws from seeking out other American companies to joint venture that kind of an operation, and was forced to team up with a Japanese company to get the cash involved in trying to develop that new jet engine, but in the past had to give up the technology to people who didn't have it. It just seems to me that that is shooting yourselves in the foot for no reason. Do you agree with that?

Secretary Mosbacher. We totally agree with it, and that is why, frankly, we have pushed very hard and this administration has come together very well on feeling the same way.

Mr. Rogers. At the same time, with the global economy now upon us, multinational corporations are going to dominate, obviously, that new world market. Is that going to freeze out the ability of the middle-size company or the smaller company in the international market? And how can we be sure that companies other than multinationals have access to the world market?

Secretary Mosbacher. I think one of the main ways is what we do and need to publicize even more, and that is that the district offices of the U.S. Foreign Commercial Service as well as the foreign offices, put out a lot of data on matchmaking of exporters and importers. We have seminars and put out publications because we feel very strongly that in order to compete in this world, the middle-size company and the smaller company—which are more prone to exporting than the larger, because many of the large companies will end up building plants in the area and then almost become part of the scene, whether it is the European Community or somewhere in the Pacific, whereas the smaller or middle-size are much more liable to be exporters to that area.

So we want to get them all the data. We have been trying to inform them of export trading companies. In some cases they have banded together in their associations to form these, and it has been a good step. So again, we are moving in this direction. We need to move faster. We are doing as well as we can right now, but we would like to broaden it even more.

Mr. ROGERS. Well, again, in today's world where the competition has switched from the battlefield to the marketplace, you are almost the new Secretary of Defense, and we want to arm you properly.

CLEAN AIR ACT LEGISLATION

Let me finish up my round here. Let me ask you about something I am not, I don't think, quite as complimentary on, and that is the Clean Air Act legislation. I am concerned that the Department has not been at the table on that issue, an issue of vital importance to a great number of us. From the news accounts that I have seen and conversations within the industry and other officials, I have been left with a sense that Commerce just simply took a powder on the whole issue.

Commerce has a major stake in that bill, or should have. It is not just an environmental issue, by any means. It is an economic debate. It affects ratepayers, industries, potentially hundreds of thousands of jobs, and all sorts of things. I hope you can prove me wrong, but I don't think you have participated in that debate, and I think the wealth of data that Commerce has access to could have had a major impact for the good. I wonder if you have any comment about that?

Secretary MOSBACHER. Well, unfortunately I have had to personally be recused from some of these discussions because of the makeup of the Clean Air situation, and from what I have heard—maybe from different sources—Deputy Secretary Murrin and Counsellor Berman have represented us well. In the global warming area we are definitely a player. We have gotten $69 million in additional funds to work on the global warming problem and get some more data, and definitely are players.

But on the Clean Air Act, let me ask Tom Murrin and then perhaps Wayne Berman to bring you up to date.

Mr. MURRIN. Mr. Rogers, one of the Commerce initiatives that we hope you and the others are pleased with is largely motivated by the interest of the Secretary in this, despite his recusal constraints. We have come to appreciate within Commerce that we may have perhaps the only Federal Government agency where on the one hand we have absolutely world class science and engineering capabilities relating to the environment in NOAA. There we have, for example, over 800 PhDs, so it is a world class national resource.

At the same time, as you know, we have a very capable economic affairs organization, typically aimed at activities more in producing accurate statistics, and these days very much involved in the census, those organizations respectively headed up by Dr. John Knauss and Dr. Michael Darby. We are conducting an in-house study, in a very analytical and professional way, of trading off some of the desirable environmental enhancements on the one hand with the competitive challenge and economic burden related to those on the other hand. We think this may be the outstanding analysis of its kind in our Government and probably in the country, and we think will serve soon to provide some very valuable policy and procedural guidance to the Administration.

So it is a top priority activity with us——

Mr. ROGERS. It is getting a bit late, you know. We are going to, the House committee is going to start marking the bill up next week, and NOAA I am told early in 1989 had extremely good numbers that challenged the severity of the problem of the acid rain accusations, and yet here we sit with our hands folded. I am just a bit perturbed that we are not using the material that we have, and to which the American Public is entitled, particularly those people who would be harmed by these very, very strict, strong acid rain provisions that could pass this Congress.

Mr. MURRIN. Well, I think much of those data have been delivered, and we also hope they are being carefully considered.

Wayne, can you comment on this, please?

Mr. BERMAN. Mr. Rogers, we have had that data. It is certainly world class, as you said, and I have personally presented it at all of the Interagency Policy Council meetings. Dr. Darby was involved in presenting the same data, unfortunately making the case of the economic implications of these acid rain decisions. I hope we contributed strongly to what I think is a pretty balanced approach by the President and the Administration.

Mr. ROGERS. Well, I have a study, recently released, which projects the direct economic impact of the Clean Air Act amendments, with details on possible job loss both under the Administration bill and the Senate bill. You may not be aware of it, but I would like to have you review it and get back to us with your comments, if that would be possible, sir.

Mr. MURRIN. I will certainly do that, sir.

Mr. ROGERS. Thank you, Mr. Chairman.

Mr. SMITH. Mr. Carr?

USTTA USER FEES

Mr. CARR. I just have a few questions. I am always intrigued by the concept of user fees. In your submission on page 7 and again on page 43 you have indicated that this year you are going to be proposing assessing a fee on those who benefit from Federal travel promotion programs.

Who are you assessing?

Secretary MOSBACHER. That will be everyone except those from Canada, Mexico, and the Caribbean.

Mr. CARR. Who are you proposing to assess the fee on?

Secretary Mosbacher. Foreign travelers to the U.S. and returning Americans.

Mr. Carr. Now how are foreign travelers and returning Americans users of the Federal travel promotion program?

Secretary Mosbacher. Well, they are the beneficiaries of not only the monies that we spend on travel and tourism, but many times that we act as a catalyst for in services in travel and tourism around the world.

Mr. Carr. How does the foreign traveler—someone comes to this country—how are they a user of the travel promotion of the USTTA?

Secretary Mosbacher. Well, very often they learn how to get here and what to do and what goes on here, all the other aspects of American travel and tourism.

Mr. Carr. Just by passively learning about the wonders of our country, they are using the U.S. Tourism and Travel Agency? Is that it?

Secretary Mosbacher. Yes. We have travel and tourism services for them all over the world and overseas, yes.

Mr. Carr. Isn't it true that the beneficiary of the U.S. Tourism and Travel Agency is our own tourism industry? Isn't that the beneficiary?

Secretary Mosbacher. Well, we certainly hope so.

Mr. Carr. Yes. Well, aren't they, then, the users of a Government-sponsored promotion activity, as opposed to our guests from abroad?

Secretary Mosbacher. I guess I happen to think that since this is not only one of the best countries in the world to travel to, but one of the least expensive today, that those travelers from overseas are fortunate to be able to learn about where to go and what to do in this country.

Mr. Brown. Mr. Carr, the fees, as you well know, are assessed on the industry based on the number of passengers coming in.

Mr. Carr. So the fee would be assessed on——

Mr. Brown. The airlines and the shipping industry.

Mr. Carr. But that would be different than what was proposed in the past. In the past it was proposed a ticket tax, right?

Mr. Brown. It was proposed an average $1 per head, but to the industry. That was the point of the proposal: that is, the industry receives the benefit of the USTTA services and ought to——

Mr. Carr. Okay, and is it anticipated this is going to be passed on to the——

Mr. Brown. We don't know. That is the decision of the airlines and the shipping industry.

Mr. Carr. So this would be a tax on the airline industry and the shipping companies. What about an attraction such as Disney World? Are we going to tax them for the promotion of bringing them customers?

Mr. Brown. This proposal only relates to the airlines and the shipping industry.

Mr. Carr. Well, why wouldn't you propose that all tourism businesses, instead of just the carriers, pay?

Secretary Mosbacher. We have the Deputy Under Secretary of Travel and Tourism, Wylie Whisonant.

Mr. WHISONANT. I have discussed this to some degree [inaudible]. We had a discussion on that but it was primarily on [inaudible]. It is not a tax. It is a user fee, and there is a distinction.

Mr. CARR. Well, I know there is a distinction. I don't know whether you were there, but a couple of years ago when the late, great Mac Baldrige was sitting in that chair right there, we had this exact same discussion. I asked the Secretary if he could tell me the difference between a user fee and a tax, and he said with a semi-straight face that it is a tax when it is proposed by a Democrat and it is a user fee when it is proposed by a Republican. [Laughter.]

But the fact of the matter is, I think this is getting pretty far from a user fee. I am not opposed to user fees, incidentally. But you know, the thing that bothers me about this is, this would be akin to Secretary Mosbacher sending me an invitation in the mail to come to one of the very famous, elegant Mosbacher parties, and then when I get to the Mosbacher front door, Secretary Mosbacher asks me to deposit in a little cup next to the door, the 25 cents for the postage that it cost him to send me the invitation. [Laughter.]

Now we are inviting our friends abroad to come to this country because they are going to spend money here, and isn't it kind of unseemly that we would tax our guests?

Secretary MOSBACHER. Maybe we should equate it more to something both Republicans and Democrats are used to. How about calling it a fundraiser?

Mr. CARR. A fundraiser? I see. [Laughter.]

Well, I am used to that, yes. [Laughter.]

I ought to get you to come to one of them. [Laughter.]

Secretary MOSBACHER. You come to mine, I will come to yours. [Laughter.]

Mr. CARR. Well, I just want to signal, I guess, by this good-natured discussion that there are a lot of us on Capitol Hill who have real serious questions about a so-called user fee in the USTTA area. Indeed, if USTTA is to have a user fee at all, it would seem that our own industry, who are the beneficiaries of the promotion—and they may well turn it around into their price structure, we understand that—but that if there was a user fee, it ought to apply to all of the tourism and travel industry, and perhaps be trust funded for only USTTA purposes.

Under the current outline, I understand here that the previous Administration sought really to raise more money than would be requested for the activities of USTTA, and a lot of us would like to support a larger appropriation for that. I think we could even find ourselves bending our definitions a little bit, if all the money was going to the USTTA.

Secretary MOSBACHER. Excuse me.

Mr. CARR. Go ahead.

Secretary MOSBACHER. I was just going to agree with you, in that we now have a travel and tourism industry that is over $42 billion that comes in. For the first time, about $41 billion in 1989 went out, so we have a net trade surplus in the travel and tourism area, so I think we all agree that it is very important, what we are doing.

I guess no one more than this Committee knows the budget constraints, so we are trying to find a way to make it all work. In many other countries that I have been in, they charge you from $1 to $10 just to get out.

Mr. Carr. Yes. That I don't like either. That is the kind of fundraisers I go to. They charge you to leave. They don't mind you coming; they charge you to leave.

Anyway, I would say too that the total appropriation requested is very, very small. I know our friends over at USTTA do a good job, but relative to the promotional activities of some of our foreign competitors, in terms of seeing Koala bears and other things on our TV sets nightly, extolling the virtues of Canada and Australia and all other places, we really don't do as much of that as we might. That would take some pretty significant dollars to do that. You are not going to do that on an appropriation of only $13 million.

Anyway, let me not take up too much time. Anything you can do—and this comes from those of us who are very active in the Congressional Arts Caucus. I know that you are a big supporter and lover of the arts. Whatever you can do to protect intellectual property is the most important. That is one of our biggest exports, and because it is intangible we tend not to realize it.

I learned the other day that Japan does not recognize copyrights of non-Japanese that are older than 1978, and the bulk of a lot of our music is in that period before 1978, and they are just pirating it. I talked to Carla Hills about that when she was before us the other day, and I know you share our belief in that.

One small thing, but it means a lot in Michigan. You know, we have the automobile industry in my state and various automobile companies and parts suppliers to name a few. We have an automotive parts industry office in Japan which is financed in part by the Motor and Equipment Manufacturers Association and in part by your department, but the funds come out of TAA.

ITA—ELIMINATION OF TAA PROGRAM

In the Trade Adjustment Technical Assistance Program you have a sub-program over there called the Market Development Cooperator Program, and yet your budget proposes eliminating the TAA program. Putting aside for the moment the question of whether that is a good idea or not, I would like to get some reading from you about this small activity in the auto parts and equipment area that is going on in Japan, that is funded through TAA now, and whether in your perfect world, if TAA would be eliminated, there would be some other source of funding for that office over there.

Secretary Mosbacher. Our Under Secretary of International Trade, who has that in his department, is right here. Mike Farren?

Mr. Farren. As a matter of fact, I was over in Japan last week and had an opportunity to talk with Japanese auto manufacturers. The MEMA office in Tokyo is working out extremely well as the interlocutor between purchasers of auto parts in Japan and the U.S. industry here.

With respect to funding, we are providing on a gradually decreasing basis the cost of maintaining that office. Frankly, it is our hope that within a relatively short period of time the industry will be in a position to pick up the full cost of the office, when there will be justification that it is going to work.

In the short term we would certainly look for other resources available to offset whatever lost funds complete elimination of TAA would result in. Our view is that under any circumstance we are looking at just another year or two before the industry will be able to clearly justify the full cost of operating the office.

Mr. **Carr**. I thank you for that testimony.

Thank you, Mr. Chairman.

Mr. **Smith**. Mr. Regula?

Mr. **Regula**. Thank you, Mr. Chairman.

Nice to see you, Mr. Secretary. I want to say that Mr. Farren was out in our district and did a terrific job in talking to people. This is part of the outreach process that I think is so necessary in your office, to reach the small business people and give them encouragement in trying to export. They are still uneasy about what is involved in exporting, and yet that is an essential element, so I hope you will do a lot more outreach. I know that you have been encouraging people to get into Eastern Europe, as a result of some of your experiences over there.

I have read your statement. It is an excellent statement.

Given the magnitude of the goals that you have established for yourself, I pray for your success, because the standard of living of the next generation is what is really at stake in all of this.

My colleague here characterized you as the Secretary of Defense, and I think perhaps I would go more for Chairman of the Joint Chiefs. I say that because it seems to me to accomplish the objectives that you have established here, you are going to need a lot of help from many other departments in Government. It was mentioned that you are getting better cooperation out of the State Department, and I think that has been a problem in the past.

IMPROVED COOPERATION WITHIN THE ADMINISTRATION

I would be interested as to how much cross-pollination there is within the Administration, recognizing that education is a key element in your success; quality—you mentioned these things—tax policy, in terms of investment, so that our industries can be competitive; environmental, obviously. I think we are going to be in a decade of dynamic tension between the economic issues and the environmental issues.

It is quite evident in the Clean Air Act.

So I would be interested in your comments on what is happening in terms of making it a total effort as far as the Administration is concerned.

Secretary **Mosbacher**. Mr. Regula, you are absolutely right. It does take the cooperation and effort of many of the parts of the Administration. For the most part, I have found that we have had a very, very good cooperative effort.

Mr. Murrin was Chairman of the Defense Manufacturing Board for the Defense Department. Mr. Cheney and I have been friends for many, many, many years, almost as many as some of you have been with him.

We have worked better with the Defense Department, after the first few small brushes, we have gotten together on a lot of things. We are working very well together, I think. We made a good joint effort on the Korean fighter. Frankly, I am not sure we could have accomplished what we did without doing it together.

The State Department I have already talked about. Incidentally, the Defense Department has been more cooperative on truly zeroing in on those things, as far as export controls, that have a more direct use militarily, and releasing the rest. We are not ever going to totally agree, and I am not sure we ever should, because their primary goal is military security and ours is economic security, and we both believe in each other's, but not to the same degree.

With USTR, they actually do put together the trade agreements. That is what they are tailored to do. We handle the trade promotion and helping the private sector move into these countries. We have worked together on those very well. We support them with most of the data they use, whether it is the GATT-Uraguay round or many of the other trade agreements.

With Treasury, we work with them constantly, and again well. All of these interagency processes go on. As a matter of fact, we sent a cable from Czechoslovakia the night before last which would be primarily Treasury's effort on some agreements for how U.S. companies would be taxed, or taxed not too much, for going into Czechoslovakia.

And the President, as many of you know, is extremely, extremely important in our trade promotion and free and fair trade. So I think we have a good team, maybe a couple of weak links here or there, but we have a good joint team working on this same set of priorities that I believe are the top priorities for virtually all of you, regardless of party. We will continue to work on it, but if you have any specific questions on it, I will be glad to try to answer.

Mr. **Regula**. Well, I am glad to hear that. I think too often we have turf problems, and we forget that we are one team. It seems to me that in the economic Super Bowl in which we are going to be in the future, we are going to have to have a Team America, and not Team Treasury and team each individual. I am pleased that you are involved in that kind of an effort, and it perhaps would establish a benchmark for the future.

What success are you having on the fair steel agreements?

STEEL AGREEMENTS

Secretary **Mosbacher**. The steel agreement, we have gotten—what is it?—19 agreements with 20-some-odd countries. We will get that for you in a minute, but I will tell you we have been very happy with the short supply agreements. We have kept them within the 30-day and the 15-day constraints that we said we would, and it has worked. We have had quite a few of them.

Yes, we have 10 bilateral consensus agreements with 21 countries, and we have 18 VRA agreements with 28 countries. In the short supply area, we have the number of actual cases here. We have completed five cases, and granted short supply in four of the five. These had to do with over 24,000 metric tons and, as I said, were all completed in the 15- or 30-day review. As a matter of fact, right now we have five 15-day reviews going on, and we expect to complete them all in a timely fashion.

Mr. **Regula**. Mr. Chairman, I have two questions I want to submit for the record. They are rather complex.

But one last question, Mr. Secretary: What advice would you have for the Congress as to what we might do to make a more competitive environment for our business community, recognizing the importance of that in the years ahead?

ENHANCING THE COMPETITIVE ENVIRONMENT

Secretary **Mosbacher**. There are a few things we can do. We talked a little about antitrust laws, which are extremely important.

Mr. **Regula**. I would agree with that.

Secretary **Mosbacher**. Also in the legal area, we have to do something about the tremendous costs of product liability. Certainly everybody has sympathy for those who are unjustly hurt, but the kind of damages that have been awarded, and punitive damages, have made us uncompetitive around the world compared to other countries that over a year give out a fraction, I mean a minuscule fraction, of what we do in those areas.

We have to get lower costs of capital. I would say that is an absolute essential, and to do that we think the capital gains tax reduction will be a major part of it. This long-term family savings plan where it goes in for seven years and it comes out tax-free, is another factor. It does two things: It lowers the cost of capital and it makes us think longer term, which is another thing we don't do enough of in this country.

Mr. **Regula**. That is true.

Secretary **Mosbacher**. On top of that, of course, we have the Education and Quality Programs. Congress passed the Malcolm Baldrige Quality Act. I think it is very important that we pursue this. Tom Murrin has done a tremendous amount of work on this, and has a background of heading the part of Westinghouse that, right after he left, due to his work and others, won one of these Malcolm Baldrige awards.

So we are pursuing trying to have that thinking permeate all of industry, not just manufacturing. As a matter of fact, the service industry and travel and tourism we talked to also, need to bring their quality up to world-class, or we won't be able to keep this kind of net balance. So there is a lot to do, and we appreciate your cooperation in working with us on it.

Mr. **Regula**. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Mr. **Smith**. Mr. Moynihan—excuse me, Mr. Mollohan. [Laughter.]

Mr. **Mollohan**. Thank you, Mr. Chairman. Wrong chamber. [Laughter.]

Picking up on your last answer, Mr. Secretary, you have stated that one of your goals is to institute a Quality Management Program at the Department of Commerce. Could you tell us in more detail what you mean by that and how you intend to implement it?

QUALITY MANAGEMENT PROGRAM

Secretary MOSBACHER. Yes. It was a joint idea of ours, and Tom Murrin has had so much experience in this and works on it day to day, I would rather let him answer it.

Mr. MURRIN. Besides, the Secretary told me I have to get off my butt and get moving on it. [Laughter.]

There are two principal stimuli, sir, that move us in that direction. One is, as you know and as you have addressed very constructively, we play a key role at Commerce in supporting American industry and its competitiveness, and we all agree that quality improvement is a key factor in that regard. So we would judge it inappropriate if we didn't practice in-house what we are preaching and promoting.

For example, just this morning, with some of the other folks who are here, we had a presentation in our executive offices to a young man who has made some outstanding quality and productivity improvements. The Pride Award, we are calling it. It is going to get a lot of publicity, and we hope it will engender a lot of interest and support throughout the 30,000-plus people who are involved at Commerce.

In that spirit, we have organized the Quality Improvement Council. We have kicked off sessions of that. At the Chairman's suggestion, for example, one of the most recent Baldrige Award winners, Xerox, will be coming in shortly to brief both the Quality Council and, in addition, most importantly, the Secretary's entire senior staff, numbering about 40 people.

The other key stimulus that we have is, very frankly—and we may be a little premature here—we want to be the model for all of the Federal Government in demonstrating, again, in-house, in Government, in an agency like ours, that the principle of doing the right things right the first time will translate to better customer service, employee satisfaction. We don't have quite the same relationship with shareholders as a business does, but in a sense you are our shareholders and board of directors, and we hope this pleases you. This is another factor that seems to satisfy the public and the media.

So we assure you it is a top priority initiative. We are drawing not only on our own expertise, which is considerable, but that of industry and other organizations. I might add we are greatly heartened that OMB is launching a Federal Government-wide initiative, and we are taking a lead role in that. We see that to be a very effective way of networking the transfer of know-how and engendering a lot of interest. So it is real, and we think we are going to be making a lot of progress.

Mr. MOLLOHAN. Are you linking with the private sector initiatives and educational initiatives that are promoting total quality management throughout the country? Are you familiar with them?

Mr. MURRIN. Well, yes. Oversimplified, as you know, the initial efforts, particularly relating to the Malcolm Baldrige Award process, concentrated understandably on manufacturing. As the Secretary just mentioned, increased emphasis is now moving into the service sector.

One of the happy developments which we didn't fully anticipate is that much of the education field and the health care field are also becoming tremendously interested. The know-how, we are finding, that relates to successful quality improvement in manufacturing is largely transferable not only to service but to those other sectors like education.

This is proving to be a very worthwhile effort, and we are finding a great deal of interest around the country. Several States, as you may know, have taken at the Governor's level top priority commitments to this, and we are linked in with those also.

Mr. MOLLOHAN. Thank you.

Mr. Secretary, this isn't a question, it is just a statement of support. I notice you treat the EDA very terminally here, and I just wanted to express appreciation for the work that the EDA has done in my district. Generally it has meant a lot to us in economic development. We have used them and worked in partnership with them very effectively. I understand your position here, but just a word of compliment to the people who are administering that program. We appreciate their good efforts and appreciate working with them, and if the program should continue, we look forward to working with them in the future.

Thank you.

Mr. SMITH. Mr. Kolbe?

Mr. KOLBE. Thank you, Mr. Chairman.

Mr. Secretary, welcome. I too join with my colleagues in welcoming you and telling you that I think your public statement today is certainly outstanding in the sense of your priorities for the Department. I certainly commend you for that.

I would like to follow up on some other questions that have been raised dealing with the Foreign Commercial Service. But first, I noticed in your press release for the Department's budget you said that you were going to be requesting additional resources this year to more effectively allocate district staff, district office staff. How much are you asking for this purpose, and what are you going to actually do with that money that is going to be used for allocating district staff?

ALLOCATION OF DISTRICT OFFICE RESOURCES

Secretary MOSBACHER. Well, we have a $570,000 request allowing for reallocation of 19 USFCS district office trade specialists. We will use a planning model to identify where staff resources can best be used, a model based on a number of economic factors and other factors, manufacturers by State, value added from size and dollar value, and really all the economic data that leads us as to where we can get the biggest bang for the buck.

Mr. KOLBE. So you expect to make some substantial changes within those district office staffs as a result of this?

Secretary MOSBACHER. Yes, but——

Mr. KOLBE. I am not sure of the extent to which this reallocates the whole district office staff operations.

Secretary MOSBACHER. Yes, it is only 19, 19 out of—Assistant Secretary Schwab is here, who can give you more specifics on it.

Ms. SCHWAB. That is 19 out of 235, so it is a relatively small——

Mr. **Kolbe**. Okay. Those are relatively small numbers that you are looking at.

Mr. Secretary, on the question of the FCS, you gave the number of 107 positions, and you broke that down. I missed the number of additional positions there would be in Japan. Can you tell me that again?

Secretary **Mosbacher**. The number of positions where?

Mr. **Kolbe**. Japan.

Secretary **Mosbacher**. Japan had 10 nationals and 16——

Mr. **Kolbe**. The total is what I wanted. Sixteen is what I hear.

Secretary **Mosbacher**. Yes, there are 16 total.

Mr. **Kolbe**. Okay, thank you. I am particularly interested in this because it seems to me just as we have been making—with your efforts and those of Ambassador Hills and the Administration and Congress—greater efforts to open up our trade in Japan, and we have been expending greater resources in that area. It seems to me that the European Community has been the greatest beneficiary of our efforts. They have tremendously increased, as I understand it, their trade representation in Japan in recent years, and they have seen as a result of that, perhaps a decline, a much greater decline in the trade imbalance that they have suffered with Japan than we have.

It seems to me that this area is going to require an even greater amount of our resources. I don't know if you wanted to comment on that. I will give you a moment to comment. Let me just make one other point on that. I note in looking at our efforts, in 1989 we had $4 million that was spent in our efforts in Japan. That corresponded to $14 million that Japan spent here in the United States on its trade activities here.

Secretary **Mosbacher**. Well, I think we need to keep bolstering. A little earlier I was talking about the Japanese innovative effort which they have just launched for importing on their side, and it is matched with our exporting. We are putting the MITI effort for imports together with our Department of Commerce efforts for exporting, and Director General Schwab and her counterpart in MITI have been meeting together.

We are working on opening areas of mutual interest, and we are going out to our exporters in this country with the story that Japan claims to be opening up for imports. Let's test it. Let's hope they are truly sincere in this. We have to take them at face value that they are, and let's see if we can build some exports from us and imports to them. It is going to take both the additions in the U.S. that we talked about and these in Japan, and maybe more in the future.

Mr. **Kolbe**. All of this effort, though, can be very quickly wiped out as the result of currency differentials? I am thinking of the battle going on right now by the Japanese to try to protect the yen. If the yen continues to fall in value, it is going to significantly impact our ability, the efforts we are making to be more trade competitive.

ECONOMIC DATA COLLECTION ISSUES

Let me turn, if I might, to the area of economic data collection. I am very interested in your activities in this area. Dr. Darby had a chance to talk some about this yesterday.

Certainly the collection of good and usable statistics is absolutely vital. I sometimes despair when I hear people say, "Well, the Census, the only thing they do is count people, and we should only appropriate money once every 10 years for them to count people." Obviously that is not the case. The kind of data that is collected on an ongoing basis by the Census is absolutely vital if we are going to have a competitive posture in the world, it seems to me. I am pleased to see that you have made this a priority area.

Yesterday Dr. Darby had a chance to mention the Boskin plan of improved Government economic statistics, but I was not able to ask him about that. I am wondering if he could just tell us a little bit more about this, what the plan is and whether or not this will entail legislation? Will you have legislative requests for this? Are there other initiatives in this area of economic data collection that you are going to propose? Somebody else may want to discuss this.

Secretary **Mosbacher**. Well, since Dr. Darby was one of the authors of this, along with Dr. Boskin, if you don't mind we will let him give it to you with much more specificity.

Mr. **Kolbe**. Absolutely.

Mr. **Darby**. Dr. Boskin and I testified on this this morning and he gave a very good statement. I hate to try and summarize, but he observed in essence that we are very concerned in the Administration about the decline in the economic statistics, the risk that this puts the country at, and the disadvantage it gives us competitively in terms of business decisions, and so the Administration has embarked upon a program of improving the economic statistics of the United States.

The first step, which is embodied not just in our budget but in other budgets, reflects what we can do immediately to bring about an arrest in the decline of the statistical system and begin to turn it around. The Boskin working group is continuing to meet to try and come up with a longer-run plan as to what to do next, and this will be completed by this summer, in order to be in time for the next budget cycle.

For this budget cycle, we have in terms of the Census—well the Commerce agencies, basically the BEA is attempting to arrest the decline in the national income accounts and in the international accounts right away, and to move towards international standards, a system of national accounts. The Census is trying to begin to get the high-tech industries, the service industries, more adequately represented in our statistics, and to get information on disadvantaged people through restoring the CIP, and bring the processing of the basic unemployment data, the current population survey, up from 1960 standards to 1990s so that we can come up with timely and more complete data on these important unemployment statistics.

Mr. **Kolbe**. Do you anticipate this is going to require any legislative changes, or is it just budgetary?

Mr. DARBY. I am not—there may be two areas of legislative changes. One concern has been allowing the BEA and Census to share data in the international area, so that the Census data which is at plant level can be combined with the BEA data which includes foreign ownership at the firm level, and we can begin to put out local and State data on foreign ownership and foreign investment in the United States. That is one issue which it is not clear yet whether that will require legislation.

The other area which was raised yesterday is eliminating the cotton ginning report, which is the only remaining agricultural statistic done by the Census, other than the Census Bureau.

Mr. KOLBE. You led right in, with a previous comment there, to one other question I had on this data collection issue, and that is data on investment trends. We passed as part of the trade legislation, as you know, the so-called Bryant amendment, a requirement for gathering data on this. It strikes me, from what little I have been able to see, that we have dismayingly old, inaccurate and imprecise information on foreign investment in this country, and for that matter U.S. investment abroad. Is that going to be a major part of this effort, to get better and more precise data on this?

Mr. DARBY. Yes, sir, it very much is. We presently have before this committee and the Senate counterpart, reprogramming to try and just maintain our current schedule, and in the Fiscal Year 1991 request a major part of the increases for BEA, roughly a quarter, are for improving on that and combining with the Census, and in the Census request to really go forward and provide better and more timely data. We are hoping, for example, to go from annual to semiannual reports on some of the most important investment results.

Mr. KOLBE. Thank you. I want to make it clear that I don't entirely concur with the uses some people in Congress want to make with this data on foreign investment, but I certainly think gathering the data is worthwhile.

Mr. Secretary, let me ask you just one question with regard to Taiwan's application to join GATT. We had Ambassador Hills before our committee earlier this week, and I asked her a question about her position, and she was very circumspect about that and you may well be, too.

I realize it is not your primary area, and you are not the primary agency on these kinds of negotiations, but you obviously play a major role in helping to formulate our trade policies. I am wondering if you have a personal view that you would like to express with regard to this application.

OPEN MARKET FOR U.S. GOODS—TAIWAN

Secretary MOSBACHER. Well, Mr. Kolbe, I would say I am more concerned, regarding Taiwan, about the fact that they are now our second largest trade deficit, second only to Japan. Now there almost is no second because Japan is almost $50 billion and Taiwan is close to $14 billion, but at this point there is no one else over $10 billion. Canada is $9 billion something, and Germany is $8 billion plus.

So I think what we need to do with Taiwan is, under the constraints of not having the direct relationship, hope that they can have an open market for U.S. goods, as we certainly do for Taiwan goods, and we hope that will be coming about, one way or another.

Mr. **Kolbe**. Yes. Is it your view that membership in GATT could assist, could help that?

Secretary **Mosbacher**. Well, GATT really is under Carla Hills, so I am afraid you have to use whatever answer you got from her, but I am concerned about Taiwan. I am sure the GATT membership is an important aspect, but I am kind of bottom line oriented, and the number bothers me more than any other aspect of it.

Mr. **Kolbe**. All right. A final question, Mr. Chairman, in the area that I have a lot of personal interest and involvement with, and that is Mexico.

I want to take this opportunity to thank you for the leadership that you have taken in this area. You have been very aggressive and active in working with Mexico to bring U.S. businesses to Mexico, to work to help improve our trade relationship. Last fall you made some remarks that warmed my heart, since I have been the advocate and chief sponsor of legislation expressing the sense of Congress that we should negotiate a free trade agreement between the United States and Mexico. This is in the nature of a real soft ball to you, to ask you just to reiterate here your views on that. Perhaps with the passage of three or four more months, you might want to update those thoughts.

U.S. TRADE RELATIONSHIP WITH MEXICO

Secretary **Mosbacher**. Well, I have been heartened, Mr. Kolbe, in what we have seen Mexico doing and the great progress they have made. As you know, they are now our third largest trading partner in the world. Of course they are our neighbor to the south, with over 3,000 miles of common border. They have gotten their inflation under 20 percent for the first time in years. We are up to over $50 billion in trade with them. We find that they are doing, as far as opening up for trade and investment, everything they said they would do when we talked some time ago.

I think long term, still, we can and should move towards a free trade ageement, but they have some constraints as far as kind of crawling before they walk and walking before they run. They are close to the middle stages of that, and I hope and believe in the long term they will be very interested in a free trade agreement, also.

Mr. **Kolbe**. I appreciate that. It seems to me that they are a pretty fast-learning toddler, as far as I can see, doing very well.

Secretary **Mosbacher**. Oh, they are doing very well.

Mr. **Kolbe**. And I am also struck, in my conversations with them and with government officials and leaders down there and here in Washington, at how the rhetoric has changed dramatically on their part. They no longer reject this idea out of hand, but are quietly saying that they also believe this is not only inevitable, but perhaps the right thing to happen.

Mr. Chairman, thank you very much, and thank you, Mr. Secretary.

Mr. Smith. Are any of these Foreign Commercial Service personnel for the Soviet Union, within the increase we are talking about?

ENHANCING FOREIGN COMMERCIAL SERVICE IN SOVIET UNION

Secretary Mosbacher. The Soviet Union? Yes, we are increasing two of the Foreign Commercial Service personnel and four nationals.

Mr. Smith. Now would those personnel—out of Moscow or Leningrad or the Republics?

Secretary Mosbacher. Go ahead and answer.

Ms. Schwab. We currently have two Americans in Moscow and no one in Leningrad. At the present time we are looking at enhancing the capability in Moscow, but also have been looking at the possibility of adding to Leningrad. We have a problem with the national employees because obviously we do not employ Soviet nationals.

Mr. Smith. Well, of course there are a number of republics over there. We don't have consulates in those republics. The only consulate we have is in Leningrad. But with the unrest we see in those republics and the demand for more autonomy—Lithuania, Estonia, Georgia, the Ukraine—if we don't have a consulate there, I guess it is rather difficult, but we could have a different problem there than we have in the rest of the Soviet Union. Do you have any plans with regard to this?

Secretary Mosbacher. Let me just add on this that we had—and then let the experts take over—we had a Joint Commercial Committee meeting with the Soviets a few months ago, in which we talked about moving out into the states or provinces, and we still hope to be moving in that direction but I don't think we are quite ready.

Ms. Schwab. At the moment there is certainly enough traffic running through Moscow so that the two people we have covering the whole Soviet Union are fairly well occupied. Up until recently there have been travel restrictions as to where embassy officials could go outside of Moscow. That obviously would have a bearing on their ability to travel beyond the immediate vicinity of Moscow.

Mr. Smith. Well, do you have Foreign Commercial Service personnel stationed in similar situations, where there is no consulate?

Ms. Schwab. Yes, obviously there are countries where we don't have as many consulates as we would like.

Mr. Smith. Do you have Commercial Service personnel in cities where there are no consulates?

Ms. Schwab. No, we do not.

Mr. Smith. This is a big problem the State Department faces, too, but what are we going to do? I mean, if you start putting consulates in one or two of those republics, all of them want a consulate. Another way to do it is to put offices, you know, a couple of representatives in some of those republics, but those republics have a different situation than you have in the Soviet Union as a whole. You haven't made any decision, obviously, but you are recognizing, aren't you, that there is a different problem in each one of these republics? The Lithuanians or the Ukrainians, or even the Georgians, especially—they are not going to think that somebody in

Moscow can be responsive to their needs. I doubt if somebody in Moscow can fully service the needs that you have in some of those republics that are a long way away and have different ethnic backgrounds, different products, different attitudes toward trade.

Also, Mr. Secretary, you are proposing—have you visited any of the Small Business Development Centers? Are you acquainted with the Small Business Development Center program?

SMALL BUSINESS DEVELOPMENT CENTER PROGRAM

Secretary **Mosbacher**. No, I have not visited any of them to date, but——

Mr. **Smith**. Well, the Small Business Development Centers were set up—I happened to author the bill a few years ago. It has been a tremendously successful program, and we have I think only five or six States that are not in it now. What we are doing is encouraging States to use their existing institutions—colleges, universities—and the expertise they have there to help small businesses that are getting started, maybe marketing advice, advice on how to get a patent, these kinds of things. They have to qualify as a small starting business to start with.

The law requires them to put up at least as much non-Federal money as there is Federal money, and so they are not going to do that if they don't think it is worth something, and we have a formula set up. It was never intended that it just be set up temporarily as a pilot program and phased out. It is a permanent program.

As we increase the number of SBDCs and increase the reliance on SBDCs, we have reduced the number of personnel in the management section of SBA, because these people are much more effective than taking an ex-Colonel and putting him on the payroll, you know. So they haven't liked it, but we have gradually reduced them and increased here.

But for several years now the Administration has sent up a budget proposing to phase out SBDCs, and you have done that again this year. Last year they got $50 million, and you have a proposal to cut it back to $30 million. Now under the law—and the law hasn't been changed to take care of inflation—there is a maximum $65 million pot, and then everybody is entitled, if they have an application and put up the money, at least as much up to their share of the $65 million pot, so it won't get more than $65 million.

But this is a good program, and it seems to me that it is inconsistent with your general approach to economics and development and everything to be wanting to phase out a program like this.

Secretary **Mosbacher**. Mr. Chairman, Ken Bolton is Assistant Secretary for MBDA. I think he can fill you in on some of that.

Mr. **Bolton**. Mr. Chairman, we are familiar with it. That program is administered by the SBA.

Mr. **Smith**. Right.

Mr. **Bolton**. And that of course is different from the program that we administer. It is an important——

Mr. **Smith**. But that is in our budget, though, and the Commerce Department proposes the reductions. It is not your program, but SBA is in our budget.

Mr. **Bolton**. I understand. I think if we look at the way that program operates and we look at the way our program operates, with the Minority Business Development Centers, our technicians provide one-to-one technical assistance directly to minority business firms. The SBDC is built around centers at universities——

Mr. **Smith**. No, it is one-to-one. The small businessman has an idea he doesn't know what to do with and he can't afford a $100,000 marketing study. He goes to the SBDC center. They sit down with him. They give him advice. They get him in touch with the right people. It is a one-to-one deal.

Mr. **Bolton**. Which is often one of our Centers.

Mr. **Smith**. One of your centers?

Mr. **Bolton**. Yes. We get referral clients from the SBDCs.

Mr. **Smith**. Oh, yes, they may refer them there occasionally.

Mr. **Bolton**. Yes, sir. We are not proposing in our budget——

Secretary **Mosbacher**. We are not proposing any reduction in the SBDCs.

Mr. **Smith**. Well, yes. It is in the President's budget, though, and under the same general category here.

Secretary **Mosbacher**. But not the Commerce Department. You are talking about the Administration budget.

Mr. **Smith**. Well, but you are proposing an increase in the Business Development Program, and I am wondering about that because the Inspector General and the GAO have found some big management problems in this program. Is this the time to expand a program that has big management problems?

EXPANSION OF BUSINESS DEVELOPMENT PROGRAMS

Secretary **Mosbacher**. Well, we have, by MBDA and programs that we do with it, we feel we get a lot of good add-ons. We get it through working with—they are working with Travel and Tourism, and we have a list of the ways that MBDA works in our Department to give them a multiplier effect. That is not only with Travel and Tourism but the Technology Administration that helps the minority engineers speed the commercialization of new technology, NTIA with working on minority-owned firms in the telecommunications industry. So we feel that we are not trying to compete with SBA in any way, because they have a good program too, but we feel the MBDA programs get particular help and are particularly important because they work with our other agencies and they are represented by a person who is a Cabinet officer, so we feel it is a very effective organization.

Mr. **Smith**. Well, I look at the positions that this additional money would be spent for, and I see that there would be five positions at GS-13 and three in GS-14. Now GS-13, that is about the easiest position for which to qualify a political appointee that there is in the Government. To be a GS-11 or a 12, you have to have some expertise. [Laughter.]

But to be a GS-13, you can qualify most anybody if you can show that he at one time supervised somebody.

Secretary **Mosbacher**. One exception to your statement, and that is your secretary. [Laughter.]

Mr. SMITH. If that is what you are doing, why are these additions in the area where it is easiest to qualify political appointees?

Mr. BOLTON. Those positions are just a few positions and they require specific skills that we don't presently have.

Mr. SMITH. For specific what?

Mr. BOLTON. Skills, skilled personnel. In the area of telecommunications, for example, while we have administration under the NTIA that focuses on telecommunications policy overall, what that will allow me to do is have a person on my staff, one person, who could then interface with the NTIA to generate opportunities in telecommunications.

Mr. SMITH. Well, if they had to have special skills in telecommunications like you are talking about, you wouldn't try to qualify a GS–13. You would probably get an 11 or a 12.

Mr. BOLTON. I think we probably need someone with pretty good experience in that area, at a 13 or a 14 level. Now that is a projection, and whether we hire a person at a 13 or a 14 doesn't have any bearing on the position requirement, but we need someone with professional and technical skills, and in order to get someone at that level we are going to have to have a 13 or higher.

Mr. SMITH. Well, I remember, Mr. Secretary, when this agency was set up. Maybe you don't know the history of it, but it was set up by Executive Order by President Nixon, when he decided he wanted to win with 80 percent instead of 75 percent, you know, and so they had to have some political appointments to make, and it has been existing ever since. It has been heavy in those areas. I think it is one you ought to watch. There is a mission, but it is more than just to have a place for some political appointees that you want to work in.

Secretary MOSBACHER. Mr. Chairman, I totally agree with you. I think—and I have been to some of these meetings where the private sector is working with these minority business developments, and I agree it is obviously not for political purposes, shouldn't be, and they are doing some good things. We made a survey that showed 80 percent of the people they have been dealing with are satisfied with the progress. I am sure it takes a lot of improvement, still, but we are getting some results.

Mr. SMITH. Fortunately or unfortunately, the Inspector General and the GAO each did a survey, and they were not very complimentary.

Mr. Rogers, do you have any questions?

Mr. ROGERS. Well, I mean, the GAO has sort of got a tainted view these days, in my judgment. I am not sure they are the objective observer of things that they once were, unfortunately. I don't know about this particular issue, but I am not too happy with GAO at this point in time, Mr. Chairman.

Mr. Secretary, let me close down the shop here as far as I am concerned. I think we would like to know the broad strokes of what you would like for us to do, other than the nitty gritty of your budget request. We know you have—your interest is in technology and in competitiveness on the American front and so forth. In your budget request you increase monies considerably for the ITA, for the economic affairs and statistics, NOAA, NIST; you deemphasize, to say it mildly, EDA; you deemphasize public telecommunications facilities grants, and of course the Census because of the wind-down of the program.

If push comes to shove and we begin to run short of money, which may or may not happen—one never knows—what do you want us to be sure that we don't leave out. What are the important, the very important things to you?

CONCLUSION

Secretary **Mosbacher**. Well, you know, these things are all interactive, so I want to tell you that we have gone through a lot of painstaking efforts to get our priorities what we think are right now, before we submitted it to you gentlemen, so we don't want to change them any. I think you have very wisely focused, for instance in having our USFCS people out there in the front lines, in the trenches. There is nothing more important than that, but we have already built that up some, you know. If we had bigger budgets, obviously we would bring that up further, but we brought it up and cut back where we thought we could in other areas, so what we are submitting to you is the levels that we think are proper across the board, to the best of our ability.

Mr. **Rogers**. Well, let me close by saying thank you for a good job so far. You have assembled a good team of people and they are up on their business, and getting America back in competition. We have a long way to go yet. I don't know whether the success of the battlefields of the future will be determined here in the halls of Congress or in the board rooms and workplaces. I have my hunch that it will not be here. It will be out there. So we wish you well in getting the Government involved, not interfering in the marketplace but helping our companies compete in the world.

Thank you, Mr. Secretary.

Secretary **Mosbacher**. Thank you, Mr. Rogers.

Mr. **Smith**. Well, Mr. Secretary, we don't want to keep you. We will have some more—oh, Mr. Mollohan?

Mr. **Mollohan**. No questions, Mr. Chairman.

Mr. **Smith**. We will have more questions, and we will work with your staff on the answers for the record, but I want to say we want to help. I think we have the same goals, at least. We do want to help with exports and with jobs and business in this country.

Thank you very much for being here, Mr. Secretary.

Secretary **Mosbacher**. Thank you, Mr. Chairman.

[The following questions were submitted to be answered for the record.]

Questions Submitted by Congressman Smith

1990 Census

Question:

Congress cut $57.6 million from the FY 1990 budget request for the 1990 Census. Additional reductions were required by sequestration. What activities or improvements to the Census will the Census Bureau be forced to eliminate as a result of these funding reductions?

Answer:

We have been concerned that the congressional cuts of $57.6 million from the President's request for FY 1990, on top of previous cuts and cost absorptions, might compromise our ability to conduct a full and fair census. We contemplated making the vacant/delete check, which will cost about $64 million, contingent upon the mail response rate. The vacant/delete check improves the coverage of the census by adding persons in housing units that have incorrectly been identified as vacant or deleted. Based on the 1980 evaluations, 1988 dress rehearsal census, and other experiences, we believe following up on these units would add about 1.5-2.0 million persons to the census count. Based on our 1980 census evaluations, we expect that many of these are minorities who would be missed in the census.

Because of the coverage implications of deleting the vacant/delete check, we have resolved definitely to proceed with it as originally planned. We base this decision on operational considerations.

Question:

In light of these reductions, the absorption of the federal pay raise, increased mileage reimbursement rates, and other cost increases, will you be requesting an FY 1990 supplemental appropriation in order to carry out the census?

Answer:

Our ability to proceed as planned within the currently appropriated amount depends primarily upon the mail response rate, which we shall know in late April. As we have told this Committee before, we had requested an FY 1990 budget that assumed a 70 percent mail response rate (as compared to an actual response rate of 75 percent in 1980.) Given the Congressional budget cuts in FY 1990, if the actual rate in 1990 is at or near 70 percent, we may have a budget shortfall. In that case, we will need to look at options to cover the shortfall. If the actual rate approximates our 1980 experience, we hope to be able to proceed within existing funding levels.

The mail response rate is critical because we must visit each housing unit for which a questionnaire is not returned. We estimate that each one percent change in the mail response rate translates into approximately $10 million. However, it is difficult to predict definitively any budget shortfall which might result based solely on the mail response rate. Other factors that may affect the size of any shortfall include keying and enumerator productivity rates, attrition and the size of the census job applicant pool. Of course, other totally unanticipated setbacks, such as natural calamity, may also affect funding needs. We will be in a better position to address our funding situation when the mail response rate is known.

To the extent that we can achieve savings in currently planned operations over the next few weeks without compromising the census, we will make every effort to do so. Assuming existing planning parameters are met and there are no unanticipated setbacks or additional savings achieved, we now expect we may need an actual mail response rate of approximately 75-76 percent. We will monitor carefully the response rate during mid-to-late April and will keep the Committee fully apprised. We understand that supplemental appropriations have been required during past decennial years.

Adequate Security

QUESTION:

The ITA budget request also includes an increase to provide "adequate security for overseas commercial officers." I thought that was a responsibility of the State Department. What additional security is needed for your commercial officers overseas?

ANSWER:

These funds will be first applied to the needs of the positions hired under the Foreign Staffing increase request and secondly to unfunded needs elsewhere. Specific locations chosen will be based on the threat profile developed by the State Department. They will be used to provide residential and transportation security both for these new hires and existing staff.

This will initiate a replacement cycle for light armored vehicles, originally purchased with State Department funds which can not be used for replacements; communications equipment to link residences, vehicles, and offices; drivers trained in escape and evasion techniques; local guards for residences; and grill work and other securing devices for residences.

The State Department discontinued providing physical security improvements for the residences of other agencies at the start of 1989. Its funds for local guard forces have declined so that other agencies' personnel are not generally offered this protection. Also, the Inman legislation on behalf of the Department of Commerce funded only capital project improvements for offices.

Allocation of Resources

QUESTION:

I also understand that the Department is reassessing the allocation of its foreign and domestic resources. What are the concerns that have prompted this reassessment?

ANSWER:

There was a major change in exchange rates from 1985 through 1988. As the rates have appeared to stabilize, it is time to reassess whether our programs are located appropriately so we can assist U.S. businesses to maximize their exports.

The last major review of the allocation of overseas resources took place in 1984 and the results were implemented at the beginning of 1985.

The last major review of the allocation of domestic resources took place in 1983 and the results were implemented in 1984.

We are applying our domestic resource allocation model to determine where the most cost-effective situations exist for placement of domestic-based personnel.

Our overseas allocation of resources keeps emphasis on those areas with the greatest export potential for U.S. firms.

Allocation of District Office Resources

QUESTION:

Your budget request also includes additional funds for one year only so that ITA can "more effectively allocate its district office staff." How will a temporary increase for one year permit a more effective allocation of district office resources?

ANSWER:

These funds are for the one time expenses necessary to relocate approximately nineteen trade specialist positions. They will be reassigned where resources can be most effectively placed to reach the largest number of small and medium sized firms with significant export potential.

Competitiveness

QUESTION:

The Conference Report on the DoD FY 1990 Appropriations Bill (Report Number 101-345, page 117) directed the Executive Branch to report to the Appropriations Committees prior to obligating certain funds made available for research and development in high definition display technology (HDTV). The chief question to be addressed is to what extent the Federal Government should play a role in developing HDTV with commercial applications? The director of the Defense Advanced Research Projects Agency (DARPA) has not been able to obtain the views of the Department of Commerce on this question, yet your budget request includes an increase for NTIA to undertake research and advocate policies related to the development of HDTV systems. Why should Congress approve this request since the Department has not participated in a coordinated, Executive Branch position on this issue, as directed by the Conference Report?

ANSWER:

The Department of Commerce is promoting ways to improve U.S. industry competitiveness. As a part of this, Commerce is in the process of assembling a broad competitive policy package for high technologies, including HDTV, that will consist of initiatives to help support the competitiveness of U.S. technology companies. This package will focus on private sector activities rather than the defense-related goals of DARPA. Further, NTIA's effort is independent of DARPA's activities.

NTIA's budget request is important to promoting the further development of HDTV. NTIA will be undertaking propagation measurements and channel assignment studies of the television band to assess ways in which broadcasters may supplement their signals with assigned television frequencies to offer HDTV.

In FY 1991, NTIA will begin an analysis to develop and define the necessary objective performance measures of transmission modes alternatives by examining the components of video encoding, compression, and transmission techniques. NTIA's work under the FY 1991 initiative would ultimately lead to standardization of these performance measures and their implementation in microcomputer-based test equipment.

NTIA will continue to coordinate with the FCC Advisory Committee on Advanced Television Services, DARPA, MIT Media Laboratory and others. As an _ex officio_ member of the FCC Advisory Committee on Advanced Television Service, NTIA has been actively coordinating with the FCC on HDTV issues. NTIA has discussed numerous issues with the FCC staff and private parties involved in the development of recommendations for technical aspects of HDTV, including frequency use, radio signal formats, modulation, power levels, and antenna characteristics. Where appropriate, NTIA will provide guidance to the FCC on testing methodologies and examine the outputs for applications to NTIA's ongoing work in this area.

NTIA will use these data and the results of the Advisory Committee's conclusions to refine and extend its technical work in defining performance characterizations of HDTV transmission alternatives, evaluation criteria, and trade-off studies that include quality testing. The technical analyses will consider specifications for advanced video performance, spectrum use and efficiency applications, and cost factors associated with implementation with such alternatives.

NTIA will continue to participate in developing the appropriate specifications in standards-setting bodies (e.g., American National Standards Institute, International Telegraph and Telephone Consultative Committee, and International Radio Consultative Committee), to assure that overall U.S. interests in the advocacy of HDTV services are being satisfied.

FY 1990 Mandated Projects

QUESTION:

The FY 1990 Appropriations Act (PL 101-162) states, in part, in the appropriations language for EDA "... notwithstanding any other provision of law, $11,350,000 shall be used to make or complete each grant designated in Public Law 100-459 (in certain subsections) ... which has not been made and for which preapplication or applications have been filed ..." I understand that most of these grants have not yet been made and several of the applicants have been told to submit data and information by EDA that was never included or requested in the original applications. Why is EDA not following the law?

ANSWER:

The FY 1989 appropriation language identified 13 projects for funding. One of these projects was subsequently withdrawn by the grantee. Of the active 12 projects, EDA funded five in FY 1989. The remaining seven consisted of six public works and one technical project.

Four of the six public works projects were returned as they were ineligible for EDA assistance. These four projects were not located within a designated area, a legislative requirement that was not exempted until FY 1990 (P.L. 101-162). Upon enactment of P.L. 101-162, the four applicants were requested to submit current applications consistent with normal EDA procedures. The remaining two applications were retained in FY 1989, and EDA continued to process these applications although neither was awarded in FY 1989. The sole technical assistance grant was not awarded and returned as it appeared that a similar project had been maintained in Defense Department appropriation language. All five applications that were returned in FY 1989 have now been updated and are being reviewed consistent with the legislative exemption contained in the FY 1990 Appropriations Act. Following is the status of the seven projects:

1. Crownpoint Institute of Technology in the State of New Mexico: The current engineering analysis should be completed by late April. EDA will then work with the applicant to finalize the grant application.

2. University of Kentucky in Lexington, Kentucky: Approved.

3. Spindletop Regional Development Project, Beaumont, Texas: Approved.

4. Marshall University, Huntington, West Virginia: Approval expected within three to four weeks.

5. Des Moines, Iowa: Approval expected in seven to ten days.

6. Ankeny, Iowa: Approval expected in four to six weeks.

7. Southeastern Area Technology Development Center, Inc: Approval expected in the four to six weeks.

FY 1990 District and Area Planning Program Implementation

QUESTION:

On January 18, 1990, the Assistant Secretary for Administration, with the concurrence of the Department's Counsellor, strongly recommended to the head of EDA that he implement the district and area planning grant program in the same manner as EDA administered that program in FY 1989 at the same level of funding less only the sequester amount. I understand that EDA has not yet released these planning funds and has ordered reductions in 115 of the planning grants below the FY 89 level minus sequestration. Why hasn't EDA implemented the instructions of the Assistant Secretary and the Department's counsellor?

ANSWER:

EDA is implementing its program consistent with the FY 1990 Appropriations Act and last year's process. The total program amount available in FY 1990, after taking into account the mandatory sequester, is $15.1 million, slightly less than last year's total of $15.3 million. In addition, EDA management is redirecting some $560,000 from other grant programs to provide a total level of $15.7 million.

University Center Graduation

QUESTION:

I understand that EDA is implementing a program of "graduating" certain university centers. The FY 1990 Appropriations Act includes language prohibiting the Secretary of Commerce from promulgating or enforcing any new rule which was not in effect on December 22, 1987, I understand there was no rule in effect on December 22, 1987, providing for graduation of the university centers. Under what authority is EDA promulgating and carrying out a university center graduation program?

ANSWER:

EDA's University Center graduation policy was published in the Federal Register (Vol. 52, No. 28, p. 4370) on February 11, 1987. This policy, which limits the time a college or university may receive assistance under the Program, was discussed with appropriate Members of Congress (including Members of Appropriations Committees) at that time, and EDA subsequently provided information on the policy to individual members in response to their requests. It has also been discussed in Congressional hearings. In addition, the policy has been debated in some detail on numerous occasions with affected grantees. In mid-December of 1987, almost a year after the formal announcement, the Department of Commerce formally notified the Appropriations Committees of EDA's intent to proceed with its policy of phasing out EDA's financial support for university centers funded for seven years or more. The Agency believes this approach, which will enable EDA to help other colleges and universities become involved in economic development, is equitable and a more effective means of helping depressed areas.

Authorizing Legislation

QUESTION:

Instead of submitting unrealistic budget requests advocating the elimination of EDA, why doesn't the Administration submit an authorization request for EDA which would include proposed management improvements to provide for more efficient and effective administration of a program which has broad support in Congress and throughout the nation?

ANSWER:

The Administration does not believe that the Economic Development Administration is an appropriate vehicle to promote the goals of economic development, and no changes to its authorizing legislation would make it so. The Administration proposes termination of EDA for the following reasons:

- o It is our belief that sustained economic development is contingent upon the fiscal stability which will come only with a reduced deficit;
- o Problems of local economic stability are resolved more effectively when the responsibilities lie with those closest to the problem ... businesses, private citizens' organizations, and State and local governments.
- o The problem of the budget deficit is simply too great to consider continuation of programs for which there are reasonable alternatives; in the case of economic development, State and local capability provides that alternative;
- o Real jobs are created by the private sector and the federal government should not substitute for private capital or attempt to manipulate investment by competing with private financial markets;
- o Terminating EDA will save $1.2 billion in budget authority through FY 1995.

Economic Data

QUESTION:

Your budget request includes funding increases for several initiatives to expand data collection and improve economic analysis used by government decision-makers. This increase also includes funds to permit the Department to carry out the principal recommendations of the Economic Policy Counsel's work groups on improving economic statistics. What are those recommendations?

ANSWER:

The EPC's principal findings include:

- o the Nation's economic statistics are particularly weak in those rapidly changing areas of the economy where accurate information is most urgently needed. It follows that modernization of statistics and modernization of the economy go hand in hand.
- o inadequacies, which can lead to poor policy decisions, exist in many of our current economic statistics, including several series produced by BEA.

- it is costing the statistical agencies more and more just to maintain a constant quality in national economic statistics.

The suggested improvements include the following:

- Productivity, Output, and Prices
  - Service Sector: Explore alternative methods for estimating constant dollar output; accelerate and rearrange timetable for service sector improvements; expedite the compilation of input/output data; increase cooperation between the statistical establishment and academic researchers; and consider the efficacy of mandatory versus voluntary surveys.
  - International Trade: Accelerate improvements in estimates of trade in services; extend efforts to reconcile import and export data to Mexico, the European Community, South Korea and Japan; continue work to increase automation of export and import data collection; and increase the ease of access to trade data.
  - Construction: Complete ongoing methodological and data collection improvements and incorporate these in the 1990 GNP revisions.
  - Prices: Expand and seasonally adjust the employment cost index; and accelerate the BLS programs to expand and improve producer, consumer, and international price indexes to measure service prices more accurately.
- Investment, Saving, and National Wealth
  - The System of National Accounts (SNA): Revise the U.S. national income and product accounts to be consistent with the major components of the United Nations system of national accounts, which are used by most of the major industrialized nations of the world.
  - International Investment: Estimate direct investment using market values or replacement cost rather than historical cost and address problems with the measurement of international portfolio investment and other capital flows.
  - Domestic Investment and Saving: Accelerate work to improve measures of investment and saving and to the extent possible reconcile differences between the various measures of saving; improve the collection, coverage, and processing procedures for the financial flow data in the Federal Reserve Board flow of

funds accounts; and undertake the proposed annual investment survey at the Census Bureau.

- Inflation Adjustments: Add supplementary series to the national income and product accounts that separate the real and inflation components of the return to capital.

Currently this is done only with the corporate profits series.

- Employment, Income, and Poverty

  - Family Income and Poverty: Begin research on developing a new benchmark estimate of poverty appropriate to prices, consumption patterns and family composition in the 1990s; and continue publication of the experimental estimates of real family income and poverty.

  - Business Establishments: Continue work toward the goal of eliminating unnecessary duplication, but avoid the loss of unique and important alternative data; and explore ways for Census to share its establishment data with the BEA, for use in improving the national accounts.

  - The Survey on Income and Program Participation; Explore the possibility of carefully linking the data from the Survey on Income and Program Participation (SIPP) to administrative records, while taking great care to safeguard confidentiality.

  - Labor Force: Continue BLS and Census efforts to improve and modernize the current population survey and the current employment statistics program; and continue BLS efforts to reconcile and reduce discrepancies between the employment series arising from the household and the establishment surveys.

  - a range of measures to improve current economic statistics.

  - the adoption by the United States of the System of National Accounts (SNA) framework, including development of satellite accounts for research and development and pensions.

  - measures to improve the quality of the Government's international investment statistics.

Program Increases for MBDA

QUESTION:

You are proposing significant program increases for the Minority Business Development Agency. What led you to the conclusion that this agency needed to be strengthened?

ANSWER:

Reinvigorating the Minority Business Development Agency is an important goal of this Administration, shared by me and the President. We believe that full participation by minorities in American business is essential for the maintenance of our nation's competitiveness and economic security. Although Department of Commerce programs have assisted minority business for the past twenty years, much remains to be done. Studies continue to indicate that minorities are underrepresented as a percentage of business owners nationwide. To address this disparity, increases are requested in the MBDA budget to strengthen MBDA's ability to promote minority business ownership and to provide services to minority businesses through our network of Minority Business Development Centers (MBDC), as well as through Public and Private Sector programs in our Resource Development activity.

For example, one aspect of our Private Sector program request is to focus on capital development so that we can begin to address the problems minority entrepreneurs face in raising sufficient capital. Another example, from the Enterprise Development program, is the rural services demonstration project. This project is being designed to deliver management and technical assistance to minorities in areas of the country not presently served by the MBDC program.

Management Improvements

QUESTION:

I understand that GAO and the Department's Inspector General have issued a number of reports stating that management improvements are sorely needed at the Minority Business Development Agency. What action is the Department taking to implement these recommendations?

ANSWER:

The MBDA has some problems that reduce its effectiveness and efficiency. The problems documented in these reports are managerial and program related, and we have taken steps to eliminate them in both areas. Since his appointment as Director of the Minority Business

Development Agency (MBDA), Ken Bolton has made considerable progress in implementing them. Some of the actions taken for management improvements include the following:

- Conducted 6 regional conferences attended by MBDA regional staff and its minority business development center personnel to stress concerns about past mismanagement practices and penalties for further abuse.
- Inspected the capabilities of the regional offices to ensure compliance with internal controls and to guard against waste, fraud and abuse.
- Issued tighter internal instructions that govern the management of MBDA's national programs.
- Hired a new and competent staff to enforce and implement the provisions of OMB Circular A-123, "Internal Control Systems" in accordance with the Federal Managers Financial Integrity Act of 1982. New staff has inspected capabilities of the regional offices for compliance.
- Transferred an experienced Regional Director to Headquarters to eliminate a backlog in grant awards and facilitate the management process.
- Hired an experienced business consultant to evaluate critical program deficiencies and to coordinate preparation of the Agency's Redirection Plan.
- Conducting weekly staff meetings and bi-weekly regional conference calls in order to direct and monitor Agency operations.

QUESTION:

Why should Congress approve a substantial program increase for MBDA before the recommended management improvements are in place?

ANSWER:

In the past 10 months, MBDA has instituted many management improvements with more forthcoming. In the interim, we must keep in mind that while MBDA is improving programmatically and managerially, the fact is, that support to minority business must continue if America is to remain competitive. Minority businesses have needs that must continue to be addressed to enable them to move into the mainstream of the marketplace.

Our request for a fifteen percent budget increase will permit MBDA to continue to improve the quality of its service by expanding its two part emphasis by upgrading the quality of its service delivery network and at the same time increasing its national program resources.

With the Administration's commitment and the leadership of Ken Bolton, MBDA Director, to see the agency's reinvigoration, this is a task that will be achieved with the requested resources.

Global Change Research Program

QUESTION:

Your budget request includes a program increase of approximately $70 million for NOAA's share of the global change research program. What is the purpose of this multi-agency program?

ANSWER:

The goal of the U.S. Global Change Research Program is:

> TO ESTABLISH THE SCIENTIFIC BASIS FOR NATIONAL AND INTERNATIONAL POLICY MAKING RELATING TO NATURAL AND HUMAN-INDUCED CHANGES IN THE GLOBAL EARTH SYSTEM.

To achieve this goal, the participating agencies have established an integrated, Government-wide effort focused on three scientific objectives.

- To establish an integrated, comprehensive long-term program of documenting the Earth system on global scale;
- to conduct a program of focused studies to improve our understanding of the physical, geological, chemical, biological and social processes that influence Earth system processes and trends on global and regional scales; and
- to develop integrated, conceptual, and predictive Earth-system models.

NOAA's Climate and Global Change Program is a vital component of the U.S. Global Change Research Program (USGCRP) and enables the Agency to bring its unique talents and special capabilities to bear on some of the highest scientific priorities identified by the Committee on Earth Sciences in the USGCRP Research Plan released in the summer of 1989. In support of the stated objectives of the USGCRP and with a special focus on providing reliable assessments and quantitative predictions of climate change and its regional implications, NOAA will pursue the following global change responsibilities:

- DOCUMENTING GLOBAL CHANGE - NOAA's planned activities will fill significant gaps in: (i) enhancing operational ocean observations; (ii) implementing a global sea-level monitoring network; (iii) monitoring changes in significant stratospheric constituents like ozone (joint project with NASA); (iv) the development and testing of new measurement technologies; (v) the development of important climate and global change measurement products derived from operational satellite (METSATS) and insitu observations; (vi) climate diagnostics and analytical studies; and (vii) the establishment of an effective NOAA and national data and information management system in support of the USGCRP.

- FOCUSED PROCESS STUDIES - NOAA's research projects are aimed at some of the highest scientific priorities identified by CES and will complement those of the other participating agencies to provide significantly improved understanding of: (i) interannual climate variability through support of planned enhancements to the international Tropical Oceans-Global Atmosphere (TOGA) Program; (ii) the role of ocean circulation and dynamics in climate change, with particular emphasis on the importance of Atlantic Ocean circulation patterns on decadal climate change and the role of the ocean as a sink for atmospheric carbon dioxide; (iii) the sources, sinks, and behavior of greenhouse gases in the atmosphere through NOAA's Radiatively Important Trace Species (RITS) Program; (iv) the importance of dimethysulfide produced by marine organisms as cloud condensation nuclei; (v) clouds, water vapor, and the global hydrological cycle, including NOAA contributions to the evolving international Global Energy and Water Cycle Experiment (GEWEX); and (vi) the effect of climate and related stresses on marine ecosystems.

- CLIMATE MODELING AND PREDICTION - In response to NOAA's longstanding environmental prediction and information services mission, the FY 1991 proposal ensures significant progress toward: (i) operational ocean modeling; (ii) near-term forecasting improvements to extend operational predictive capability on monthly and seasonal timescales; and (iii) the design and implementation of an effective multi-agency approach to significantly advance climate prediction capabilities on interannual and decadal timescales.

QUESTION:

What difference does a one to two degree change in the average temperature make?

ANSWER:

Past climate can put such a change in perspective. During the Little Ice Age, a period of protracted global cooling, frost fairs were held on the frozen Thames River in England during winter, and settlements in Greenland were lost to advancing glaciers. Estimated global cooling during this period was only about 1.5 C. Since 1860, a global warming of only 0.5 C. has occurred. A long-term global warming of several degrees is not within recent human experience, but its potential consequences, such as sea level rise, water supply shifts or agricultural impacts, could be quite significant.

NOAA's Program will not affect climate change but rather will provide the information to make the best policy decisions on adapting or responding to climate change. It is crucial to know how big the warming will be, when it will occur, and where the regional effects will be most severe. This Program is one of NOAA's highest priorities because the effects of even a one-to-two-degree warming in the next century could be significant. The cost of developing and making available to national decisionmakers the best possible predictions is modest in comparison.

Coastal Ocean Science Program

QUESTION:

You're also requesting a program increase to continue the FY 1990 initiative in Coastal Ocean Science. What information do you hope to gain from this multi-year research program, and how much will it cost?

ANSWER:

The FY 1991 request of $17.4 million is only $11 million above the FY 1990 enacted amount. The need for this modest increase is clear. Over the next decade, federal and state governments will make decisions about the use of coastal and Great Lakes waters and their resources that will determine whether this economically and environmentally important area will continue to be a valuable national resource that provides important goods and services to the Nation.

For example, billions of dollars of both public and private funds will continue to be invested to enact legislation and develop and implement resource management plans; install and operate pollution control equipment and other measures; conduct waste disposal operations; modify the physical environment; monitor and respond to emergency events (such as hurricanes and coastal flooding) and assess and compensate for their damages.

The information currently available to make these decisions remains incomplete and often inadequate and inaccessible to appropriate levels of government and the private sector. As a result, most decisionmakers and scientists continue to address specific problems in selected coastal and Great Lakes areas on a piece-meal basis.

These investments in NOAA will improve the basis upon which the Nation makes its environmental decisions. NOAA's program increases will provide for comprehensive attacks on critical environmental problems and identify and protect coastal resources today and in the future. The programs supported by the increase have been reviewed and developed strategically to both confront today's problems and to invest in the future by putting in place programs and infrastructure to deal with tomorrow's challenges.

Modernize National Weather Service Equipment

QUESTION:

The NOAA budget includes increases for continuation of the program to modernize the National Weather Service's equipment (NEXRAD and related units). Will the Department maintain all existing public warning and forecast stations until the new stations are operational?

ANSWER:

The FY 1991 Budget includes funding to maintain existing public warning and forecast stations. When the new Weather Forecast Offices assume forecast and warning services with no deterioration of existing services, current Weather Service Offices will be consolidated.

LANDSAT Six Remote Sensing Program

QUESTION:

The NOAA budget also includes additional funds for the final part of the LANDSAT Six Remote Sensing Program. What are the recommendations of the Department to the National Space Council concerning the options for continuing LANDSAT-type data after LANDSAT Six?

ANSWER:

The Departments of Commerce and Defense have jointly developed a Landsat Implementation Options Study for the OMB and the National Space Council. This study outlines a series of technical and management/funding alternatives for defining a follow-on land remote sensing program after Landsat Six. The Department has not provided specific recommendations to the National Space Council concerning the alternatives.

Replacement Program for GOES Meteorological Satellite

QUESTION:

I understand that the replacement program for the GOES meteorological satellite will cost some $400 million more that the contractor's original estimate. What is the status of the replacement program, and what action has the Department taken in light of these horrific cost increases?

ANSWER:

The original GOES I-K contract value was $203 million. When GOES L and GOES M were added, the contract value was increased to $276 million. At that time, NASA estimated this contract would cost $403 million; this amount was included in the FY 1988 President's Budget. The cost for the GOES I-M contract included in the FY 1991 budget submission is $606 million.

NOAA, NASA and Ford Aerospace are currently working toward launch of the GOES I satellite in June 1991.

To constrain these costs to the greatest extent possible, actions taken by NOAA include:

1. Continue to keep the pressure on NASA and the GOES contractor during frequent senior management meetings, in which program status is reviewed and program direction defined.
2. Through a small resident staff at NASA Goddard, NOAA observes and has a technical input to most NASA technical contract-related activity.
3. For all purchase orders and task orders issued relative to the contract and supporting activities, NOAA reviews each action in advance.
4. NOAA participates as an observer in all design reviews and other program reviews relative to the contract held at NASA or at contractor facilities.
5. NOAA reviews NASA cost estimates prepared twice each year (NASA program operating plans) and provides budgetary guidance to NASA consistent with available NOAA funds.
6. NOAA participates in Senior Management Reviews held quarterly. These reviews began in 1987, when NOAA expressed strong concern about the status of the program and asked that NASA pay more, high-level attention to the GOES program.

7. NOAA directed NASA to restructure the GOES I-M contract to a fixed-price type contract at the earliest practical date.

8. NOAA developed procedures to work with NASA in making limited performance and performance testing compromises if necessary to reduce cost and improve the probability of obtaining the launch of GOES I at the earliest practical date.

Question Submitted by Congressman Carr

Advanced Manufacturing Centers

QUESTION:

Are there any funds in the NIST budget to establish 2 or 3 additional Advanced Manufacturing Centers? What is the prospect for the future of Advanced Manufacturing Centers?

ANSWER:

We visited the Advanced Manufacturing Center in South Carolina on March 5, 1990. We were very favorably impressed. Our current plan is to initiate one to two new centers in the next two years.

Questions Submitted by Congressman Early

Influence on EC 1992 Regulatory Activity

QUESTION:

What role is the Department playing in the formulation and implementation of regulations governing a unified European market (EC 1992)? Does the Department have a lead role?

ANSWER:

In recent months, the European Community Commission has become very open to a technical dialogue over the shape of U.S. and EC regulatory initiatives.

There is a shared perception that our stake in each other's markets is too large to allow disruption caused by incompatible or costly redundancies in regulations.

The Department is the lead agency to organize and advocate U.S. business response to these new EC regulatory initiatives that affect market access without explicit discrimination.

In May the EC agreed to open much of their standards, testing and certification deliberations to allow U.S. Department of Commerce-led dialogue in one of the most important market access issues coming out of the European Community.

Similarly, the Department has recently responded to EC requests for information on patents and copyrights and commercialization of technology.

The result of this increased dialogue is to identify areas that need special attention to avoid interruptions of trade while still maintaining the integrity of our respective regulatory structures.

The Department leads on all business-related market access sector-related issues in EC 1992 that are not actually subject to trade negotiations. Standards, intellectual property, labelling and packaging issues, investment rules and rules that bear on the behavior of business are examples of the areas in the EC 1992 program that the Department leads as the chief advocate for business.

USEC Brussels

QUESTION:

Does the Commerce Department have direct representation in the U.S. Mission to the European Community in

Brussels (USEC)? Is there a Commerce delegation, so to speak? If not, why not? Which department comprises the bulk of this mission?

ANSWER:

The Commerce Department began the process to establish a US&FCS presence at USEC over two years ago.

We have received approval to establish an office, and by summer plan to have it in full operation with two officers and three foreign service nationals.

Department of State officers comprise the bulk of the staff at USEC.

Eastern Europe Trade

QUESTION:

With respect to Eastern Europe, there is a great deal of discussion about economic changes taking place and trade opportunities for U.S. companies. Is Commerce the lead agency in this area?

It seems that U.S. aid that has been provided or is being discussed is geared toward investment by U.S. businesses. What effort or assistance is being provided to enhance export opportunities for the U.S. companies particularly where the export would be beneficial to the importing country, given the economic problems faced by some of these countries?

Are European and other countries, such as Japan, using aid to increase or enhance the likelihood of the purchase of their exports?

ANSWER:

Commerce is responsible for the private sector outreach segment of the Government-wide assistance program for Eastern Europe.

In January 1990, the Eastern Europe Business Information Center (EEBIC) was established at the Department of Commerce. The Center's staff provides oral and written information on business opportunities in Eastern Europe and U.S. government support programs to the roughly 200 calls received daily from U.S. businesses interested in trading and investing in the region.

The budget request for FY 1991 includes proposed increases for publications on Eastern Europe and additional staff (32 new positions in Eastern Europe). Our commercial offices in Warsaw, Budapest, and Bucharest are assisting a greatly increased number of companies and we are moving to increase their staffs.

We also will be opening commercial offices in Prague and Berlin this summer.

We are expanding our trade promotion efforts in the region. Our exhibitions at the major trade fair in each country are larger this year, with the U.S. Pavilion at the Budapest International Fair in May, for example, more than triple its previous size.

In addition, we are increasing the number of trade missions to the region. A highly successful telecommunications equipment trade mission was held in Poland in February, and others in electric power generation, food processing, coal and other areas are planned for 1990.

The Department is co-sponsoring with the U.S. Chamber of Commerce a major conference in April on "Doing Business in Eastern Europe and the USSR," which is designed to stimulate greater private sector interest in doing business in these countries.

Our country desk officers are working on an individual basis with many companies seeking to expand their business in Eastern Europe, and our District Offices serve as a local point of immediate assistance.

We are preparing a number of other programs which will be launched this spring and summer to assist U.S. companies penetrate the East European market.

US&FCS Budget

QUESTION:

Your budget request proposes an increase for the U.S. and Foreign Commercial Service. What are your plans in this area for FY 90 and FY 91? Do you envision a need for additional expansion in the future or changes in the current program and approach, given events in Europe?

ANSWER:

In 1990, we are establishing US&FCS offices at the U.S. Mission to the European Communities (USEC) in Brussels and at the U.S. Embassies in Prague and East Berlin. Yes, our 1991 budget request asks for 107 positions and $7.912 million to expand activities overseas. Of the 107 new positions requested for 1991, over half are requested for Europe. 32 are in Eastern Europe and 30 in Western Europe.

US&FCS Coverage

QUESTION:

In how many countries do we now have US&FCS

representation? How many countries are not covered by the US&FCS? Please provide a list of the latter for the record. Are any of these major markets? If so, why isn't there a US&FCS presence? How is trade and export promotion handled in those countries where there is no US&FCS presence?

ANSWER:

The U.S. government has a full, formal diplomatic presence in 146 countries. American commercial interests are represented by the US&FCS in 65 of the countries and by the Department of State in the remaining 81. However, we expect to establish a US&FCS presence in Czechoslovakia and East Germany this year and in Bulgaria next year.

We estimate that the State representation in 81 countries covers approximately 10% of the export market for U.S. business.

Those countries not currently served by the US&FCS are:

> Antigua and Barbuda, Bahamas, Bahrain, Bangladesh, Belize, Benin, Bermuda, Bolivia, Botswana, Brunei, Bulgaria, Burkina Faso, Burma, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cyprus, Czechoslovakia, Dijbouti, Equatorial Guinea, Ethiopia, Fiji, Gabon, Gambia, East Germany, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, Holy See, Iceland, Jordan, Laos, Lebanon, Lesotho, Liberia, Luxembourg, Madagascar, Malawi, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Micronesia, Mongolia, Mozambique, Nepal, Nicaragua, Niger, Oman, Palau, Papua New Guinea, Paraguay, Qatar, Rwanda, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, Sudan, Surinam, Swaziland, Syria, Tanzania, Togo, Tunisia, Uganda, Uruguay, Western Samoa, Yemen, Zaire, Zambia, and Zimbabwe.

The United States does not currently have a full, formal diplomatic presence in Afghanistan, Albania, Cuba, Kampuchea, Namibia, North Korea, and Vietnam. Unoffficial commercial and other relations with the people of Taiwan are maintained through a private instrumentality, the American Institute in Taiwan.

Commerce - State Cooperation

QUESTION:

To what extent is there coordination at the senior management level between Commerce and State?

ANSWER:

The close working relationship between Secretaries Mosbacher and Baker has set the tone for a better rapport between State and Commerce.

Under Secretary Farren's good relations with Under Secretary of State Selin have likewise led to considerable progress on such issues as State's provision of administrative support and security for US&FCS officers, designation of US&FCS senior commercial officers as Minister-Counselors, and other administrative matters.

US&FCS Director General Schwab and her staff in turn have developed good working relations with their State counterparts, with whom they hold regular meetings to discuss a variety of operational issues.

There has been improvement also in the relationship between US&FCS posts and those where State has responsibility for the commercial function. Under the "partnership post" arrangement, US&FCS officers provide informal counsel and assistance to their State colleagues, much to their mutual satisfaction.

Domestic Review

QUESTION:

The budget document indicates that a review of ITA domestic field operations is underway. What is the purpose of this review?

ANSWER:

The purpose of the review is to enable us to assign resources where they can be most effectively placed to reach the largest number of small and medium-sized firms with significant export potential.

Telecommunications Procurement

QUESTION:

The other week I noticed a brief article in the newspaper concerning a major telecommunications procurement by a European Government where the two remaining bidders in contention were a U.S. firm and a Japanese firm. According to this article, our embassy became aware of an attempt by the Japanese Government to intervene with this government on behalf of the Japanese bidder and informed Washington whereupon you and some other senior officials took steps to ensure that the process was done on the basis of merit so that the U.S. company had a fair shot. First, is this true and what can you tell us about this incident? Second, how common is this type of incident?

ANSWER:

We believe the procurement to which the Congressman refers involved the supply of the second switch in Indonesia. The newspaper account of the U.S. Government intervention in this case is essentially accurate. A number of Administration officials, including myself, contacted Indonesian officials urging them to make the decision on the basis of technical and commercial considerations. The Indonesian Government has decided to retender for this contract and the five companies that were semi-finalists in the original competition have been asked to submit new bids.

All too often U.S. companies competing for large contracts abroad are faced with foreign competitors that are being supported by political pressure from their home governments. In the telecommunications sector alone there have been examples of such situations in Brazil, Italy, Spain, Hong Kong, France, Korea, Argentina, Turkey, and China in the past few years. When we and companies agree that it would be helpful to have a show of support from the U.S. Government, we contact the appropriate government official in the procuring country.

Consulates in US&FCS Countries

QUESTION:

Is it true that in US&FCS countries there are 66 consulates where State Department officers take the lead in promoting exports? If so, why is this the case? I thought that the Foreign Commercial Service was supposed to have the lead role.

ANSWER:

Diminishing returns from resources is the principal reason why the US&FCS is not represented at all the consulates in US&FCS countries. Not all consulates have a sufficient caseload of export-related inquiries to justify a US&FCS presence. For example, the consulates in northern Mexico tend to answer import-related questions from U.S. businessmen.

The average cost of posting an American officer assisted by two foreign Service Nationals at any one post is $400,000 a year, or $26,400,000 for 66 posts.
We find that the State Department Consuls General are taking a closer interest in commercial work, and coordinating trade promotion activities with our commercial officers in that country. The US&FCS has also increased the travel budget of its commercial officers to permit more frequent visits to constituent posts.

Former Government Employees

QUESTION:

Recently, there have been several news and magazine articles about the issue of government officials involved in trade matters--policy development and negotiations--who leave government service and then advise and/or represent foreign clients or governments who are on the other side of the negotiating table from us. What do you think about this situation, Mr. Secretary?

Does this situation put the U.S. at a disadvantage in trade discussion/negotiations?

What is the Department's position on H.R. 1409?

ANSWER:

We are also troubled when we read about former senior officials who end up advising foreign governments. While everyone has a right to make a living--including ex-government officials--I am concerned about people involved in sensitive matters like negotiations going over to represent the other side.

There is now in place new legislation, which takes effect in January 1991, that places new post-government employment restrictions on senior officials, particularly those involved in international trade. These seem tough but fair, and I would like to see how they work.

The Administration has yet to take a position on H.R. 1409, which I understand would basically increase the duration of these restrictions.

Patent Pendency

QUESTION:

The U.S. average patent pendency is 18 months. I understand that for other countries, it is 5 to 7 years, sometimes longer. Does this disadvantage U.S. firms that file for patents in other countries? What effect, if any, does this have on U.S. competitiveness? Do countries use this to impede U.S. exports? If this is a problem, what are we doing to address this situation?

ANSWER:

The USPTO is the only major patent office in the world which issues patents in an average of 18 months. The 18 months' pendency program provides substantial benefits to industry. Industry wants a patentability determination prior to publication of their technology to allow them to retain as trade secrets subject matter found not to be patentable. The major reason for 18 month publication is to ensure early disclosure of technology which is one of the basic premises of any patent system. When other countries publish without a concurrent patentability determination both U.S. and foreign firms are disadvantaged. Other countries have struggled to provide search results or patentability determinations by 18 months but have had mixed results. When a patent is issued in 18 months by the USPTO, exclusive rights are granted and technical disclosures are published in our own language.

Most foreign countries publish the contents of a patent application filed in that country 18 months after the application is first filed anywhere in the world. This publication gives interested parties in that foreign country the benefit of knowledge of that invention in their own language, while the inventor is usually assured of some rights during the period from publication to patent grant, if a patent is ultimately granted. The rights granted after publication, but before patent grant, are typically weaker than those associated with the grant of a patent, particularly because they do not include the right to exclude others. The knowledge gained from early publication places competitors in a favorable position in planning research and marketing efforts, while the long pendency and uncertainty of patent grant and scope of patent protection add additional uncertainty and risk for the investor in making investment decisions. These delays and uncertainties are particularly difficult for small businesses to absorb.

In many foreign countries, patent term cannot exceed a given number of years measured from the date of filing of an application. Clearly, any significant delay in granting patent rights reduces the effective term of protection.

While most delays in granting patent protection tend to have a negative impact on firms seeking protection, some delays in some industries can have the salutary effect of postponing the costs of prosecution until a decision is made to develop a product for market. For example, in regulated industries such as pharmaceuticals and agricultural chemicals, where significant expenditures and delays in obtaining marketing approval are typically encountered, delay in examination of a patent application and associated costs can provide additional time to make investment and marketing decisions that may result in not seeking patent protection and the associated cost avoidance.

On the whole, U.S. industry is best served by a patent system which provides timely patentability decisions. The strength of U.S. intellectual property rights and

U.S. competitiveness are interrelated and consequently both benefit from prompt issuance of valid patents. Maintaining our 18 months' pendency program is in the overall best interest of the U.S. It is a standard which other countries should adopt.

Changes in Eastern Europe

QUESTION:

Given the remarkable changes taking place in Eastern Europe, discussions are now under way relative to the relaxation of COCOM Export Controls. Would you summarize the U.S. position on this issue and bring us up to date on the status of these discussions?

ANSWER:

From the outcome of the special COCOM meeting held in February to consider developments in Eastern Europe and to formulate a multilateral response, it was clear that COCOM continues to play an essential role in ensuring Western security. However, it was also recognized that the multilateral system of strategic trade controls must adapt to the changing political and economic climate in Eastern Europe.

The U.S. Government is in favor of liberalizing export controls toward Eastern Europe in a measured approach. The USG position involves procedural reforms as well as an intensified program for streamlining the COCOM control list to reflect truly sensitive strategic commodities.

Essentially, this would mean a shorter control list, resulting in a reduction of the burden on national licensing and enforcement systems for items of questionable strategic significance or items that are widely available from non-COCOM sources. A national strategic review is currently being done by the Joint Chiefs of Staff (JCS) at the Defense Department. The results of this review could have a major impact on our ability to negotiate within COCOM.

In an important procedural step, COCOM members have agreed to reduce case processing time by one-third, from twelve weeks to eight weeks.

Within the context of COCOM, there is also a need to seek and obtain commitments from the new East European governments that Western technology will be protected against diversions. Therefore, as an integral element, long term liberalization will depend upon the level of safeguards that the Eastern European countries adopt.

We expect productive results in the next few months from the efforts underway within the U.S. government and abroad to develop an appropriate and meaningful response to the countries in Eastern Europe that have embarked upon democratic reforms and that also agree to safeguard Western technology.

QUESTION:

Would you outline the Commerce Department's role in these discussions? What are the roles of the State Department and the Department of Defense?

ANSWER:

The Department of Commerce plays a key role in the COCOM discussions consistent with our statutory authority under Section 5(c)(3) of the Export Administration Act, as amended. This provision requires the Secretary of Commerce to conduct reviews of the Control List, to make revisions to the list and to use the data developed in formulating the United States proposals to COCOM. Section 5 (c)(3) clearly designates the Department of Commerce with the primary responsibilities for guiding this process.

The Department of Commerce is heavily involved in conducting the technical analysis necessary for initiating U.S. recommendations to COCOM, including those for liberalizing trade with East Bloc. This is an interagency process in which we consult with the Department of Defense and State to reach a final U.S. position. However, because the U.S. imposes national security controls cooperatively with our COCOM partners, positions must be negotiated in COCOM to obtain consensus for changes to the list.

While Commerce participation remains active throughout the process, the Department of State leads the U.S. COCOM delegation and has responsibility for negotiating the U.S. positions in COCOM. The Department of Defense provides technical and procedural input, with an emphasis on strategic concerns consistent with their agency advisory role. The secretary has requested State to approve the addition of a DOC technical specialist to the permanent COCOM delegation in Paris, as provided for by the Committee in the FY 1990 Appropriation.

QUESTION:

Briefly, summarize what impact a relaxation of export controls and change in COCOM policy would have on the activities of the Department and its agencies.

ANSWER:

Changing COCOM policy and relaxing export controls will affect Commerce in several different ways. On the one hand, the Department is moving forward to adopt a general licensing approach for the majority of COCOM controlled items exported to our COCOM partners. This will definitely reduce the burden of processing large numbers of individual export licenses to those countries.

On the other hand, to date licensed exports to COCOM proscribed destinations have been limited, primarily by the strict COCOM rules. Relaxing of these rules should open great opportunities for trade with all COCOM proscribed destinations, especially to Eastern Europe. While liberalization will reduce the overall number of applications that heretofore required little analytical or interagency review, it will increase the number of complex license applications received requiring significant technical evaluation and involvement of policy officials. The net effect of these changes remains to be determined.

In addition, Commerce has already offered technical support and assistance to a number of the new governments in Easter Europe regarding their adoption and implementation of a safeguard program to protect Western technology. In order to facilitate and assist in the transition process, Commerce is prepared to make available appropriate personnel in our Embassies to assist in strategic trade matters directly related to Eastern Europe.

Representative to COCOM

QUESTION:

I believe the FY 1990 Bill included funds for a Commerce Department representative to COCOM. What is the status of this? If a Commerce representative to COCOM is not in place, please explain what the delay is.

ANSWER:

Senate Report Number 101-144 directed that $150,000 be made available for a representative of the Department of Commerce to the Coordinating Committee (COCOM). Since that time DOC has supplied the State Department with information on the necessity of having a DOC representative at COCOM. Formal notification was received from the State Department disapproving the establishment of this position. BXA is in the process of determining what additional steps can be taken to implement the stated wishes of the Senate.

MOU with South Korea

QUESTION:

What is the status of the proposed MOU with South Korea on the F/A-18?

ANSWER:

A draft MOU was presented to the South Korean Government in February 1990. The South Korean Government is in the process of reviewing the MOU. Comments and formal negotiations are expected to begin in early May.

The Department of Commerce will take an active part in these negotiations.

BXA Field Offices

QUESTIONS:

The FY 1990 Appropriations Bill and accompanying report provided funds and guidance for the opening of three BXA offices. Has the conference directive been carried out?

ANSWER:

Yes. The Department plans to open offices in Nashua, New Hampshire, Portland, Oregon, and Santa Clara, California. The office in New Hampshire will be staffed with six BXA specialists and will serve the Boston/Nashua area as well as the New England region. The Portland location will have two specialists co-located with the International Trade Administration (ITA), and Northern California will have two BXA specialists.

The New Hampshire office is expected to open in September 1990, the Santa Clara office will open in May 1990, and Portland by July 1990.

Consolidation of NMFS Field Operations

QUESTION:

The NOAA budget proposes approximately $4 million dollars in savings as a result of the consolidation of NMFS field operations. Why are you proposing this consolidation?

ANSWER:

The proposed consolidation provides an opportunity to increase the efficiency and effectiveness of NMFS laboratory activities through a review of the agency's field research structure. By conducting a comprehensive survey of laboratory facilities, research orientation and personnel costs, the Department will be better able to determine ways to conduct ongoing programs more efficiently as well as enhance laboratory support for NMFS programs.

QUESTION:

I understand that a study of NMFS field operations is underway. If this is the case, why are you proposing to consolidate operations before the results of this study or review are known? How do you know that there will be any savings? Isn't this putting the cart before the horse?

ANSWER:

Based on the study of the Northeast Region's laboratory facilities conducted by the Department of Commerce, it is clear that significant savings can be achieved and NMFS laboratory efficiency improved through consolidation. The ongoing study is not intended to verify that the savings exist, but to determine the specifics on how the consolidation will be implemented.

Funding for Major Maintenance Projects at NOAA

QUESTION:

I was pleased to see that the budget request for NOAA includes funds to initiate major maintenance projects at NOAA facilities, albeit a modest amount. In general, how would you characterize the condition of NOAA facilities? Is this part of a multi-year plant upgrade of NOAA facilities?

ANSWER:

It is very difficult to make a generalization regarding the condition of NOAA's physical plant, largely because of the varying ways in which these facilities came into NOAA's inventory. NOAA was formed in 1970 by an executive reorganization that drew organizational units out of the Departments of Commerce, Interior and Defense and the National Science Foundation. Each of these units was housed in facilities that reflected the building needs and priorities of their earlier parent organizations. Thus, NOAA's facilities in 1970 were of widely varying age, physical condition and features. With a few notable exceptions like the construction of several new buildings as part of the consolidation in Seattle at Sand Point, relatively little has changed since then.

The attached bar chart provides a quick overview of NOAA's building inventory. It identifies the number of NOAA-owned buildings by the year in which they were constructed. From this chart one can conclude that:

- there are a large number of buildings that are between 20 and 35 years old, an age where major building components (e.g. heating ventilating and air conditioning, electrical, roofing) have reached or exceeded their useful lives and require placement;

- there are a number of buildings that are between 35 and 55 years old that clearly will require close attention in maintenance and repair--some are even older (three of NOAA's buildings are over 100 years old);
- there has been very little building since 1975; and
- due to very little new construction, the average age of the inventory in 1990 is 28 years.

In addition, it must be noted that some of NOAA's operations are housed in buildings that were constructed for entirely different purposes and are thus ill-suited to meet current and anticipated agency requirements.

The intent of this initiative is to provide an adequate base of annual funding to assure that NOAA's program activities and employees are, and will continue to be housed in, facilities that are free from imminent safety hazards, meet environmental mandates, and materially assist in carrying out the agency's missions. In achieving this objective, NOAA will survey, over a period of years, its entire owned inventory of buildings to determine required repairs, replacements, alterations and renovations.

QUESTION:

I also see that you are requesting funds to initiate a modernization and upgrade program for the NOAA fleet and to reactivate one vessel. This is a significant departure from past policy. Tell us why you feel this program is necessary and would you give us a brief summary of what this program will entail?

ANSWER:

The NOAA fleet has an average age of 26 years and is facing block obsolescence. None of the ships has received significant rehabilitation to extend their service lives or provide modern instrumentation support for scientific research. A service life extension program must be started if the fleet is to remain operational in the future. The program will include overhaul or replacement of major ship systems, modernization of laboratory spaces and hull refurbishment or reconditioning.

Questions Submitted by Congressman Regula

Uruguay Round Antidumping Negotiations

QUESTION:

Circumvention of outstanding antidumping orders is a major problem in the implementation of the Code and U.S. law. In the context of the GATT Uruguay Round negotiations, what progress has the U.S. made concerning its efforts to maintain and strengthen international dumping rules? Can you respond in general, and more specifically in writing, to your efforts regarding the following ECAT proposals: adjustments for indirect expenses, averaging prices in the determination of U.S. price and foreign market value, de minimis duty level, determination of injury, public interest determination, and sunset provision?

ANSWER:

Last November, the U.S. tabled an ambitious proposal to address not only circumvention, but also input dumping, repeat dumping and other practices which diminish the effectiveness of an existing antidumping order.

We have actively lobbied for our proposal in both the formal negotiating group and in numerous bilateral consultations with other interested delegations.

Progress has been difficult, but most of our trading partners now acknowledge that circumvention is a real problem which deserves to be addressed. They have not been as receptive, however, to our arguments on the other practices which we would like to see deterred.

Despite this, we have emphasized that all of our issues need to be dealt with in order for there to be any agreement that is satisfactory to the United States.

On adjustments for indirect expenses, we have expressed concern that adjusting for every conceivable expense could result in the masking of dumping margins.

On averaging of prices, we have suggested that such a practice could obscure dumping which may be occurring in selected product lines, in selected regions, or at selected times within the period investigated.

On de minimis duty level, we have pointed out that we already maintain a de minimis rule of 0.5% or less, and that a number much larger could permit injurious dumping to continue in certain price sensitive markets.

On determination of injury, which encompasses many issues, we have defended the logic of cumulation and of not basing injury findings on the presence of any one factor.

We have said that public interest determinations would dangerously politicize U.S. antidumping practice.

We have also insisted that an automatic sunset clause has no logic unless there can be an assurance that the dumping will not continue or the injury will not resume.

Actions Taken to Aid U.S. Companies in Eastern Europe

QUESTION:

Mr. Secretary, as you know, some American business has seen the events in Eastern Europe as an opportunity for new markets. As a key formulator of our nation's trade policy, you have demonstrated exceptional leadership and foresight concerning this matter. Can you describe the specific actions you have taken to aid domestic companies in this pursuit, such as your trip to Poland last November with a U.S. business delegation?

ANSWER:

Our September 1989 Mission to Hungary and Poland focused on developing the commercial framework and climate in which American companies could do business more successfully. A representative group of American business representatives accompanied us in both countries, bringing a practical business orientation to our discussions. The heads of the Overseas Private Investment Corporation and the U.S. Trade and Development Program participated likewise, introducing both American business and our East European hosts to the assistance available from their programs.

During these missions:

-- We agreed with both Poland and Hungary to initiate negotiations of Business and Economic agreements which will give greater confidence to traders and investors;

-- We signed Tourism Agreements with both Poland and Hungary designed to encourage expansion of tourism-related trade and investment, and signed a Private Business Agreement with Poland through which both governments will assist cooperation between our private sectors.

-- We undertook to send legal and accounting seminars to Poland and Hungary, as well as seminars to provide information about the U.S. Generalized System of Preferences (GSP) and programs under the SEED Act.

-- We inaugurated the International Executive Service Corps programs in Poland, and stimulated the creation of an American Chamber of Commerce in Hungary.

During the November Presidential Economic Mission to Poland, leading American business executives took a first-hand look at the needs of the Polish economy and gave their recommendations on what the Polish and U.S. governments, and the private sectors could do to speed Poland's recovery and transition to a market economy. Their recommendations serve as the basis for our ongoing efforts, particularly in such vital sectors as telecommunications and energy.

Our February 1990 mission to Czechoslovakia was a first step in revitalizing trade relations with that country. Together with the business representatives who accompanied us, we exchanged views with the new Czechoslovakian leadership about the conditions needed for expansion of business. We promised to bring a larger executive mission, which I will lead, to Czechoslovakia, when the bilateral Trade Agreement is concluded.

Steel VRA's - Inclusion of 60" Stainless Steel Sheet

QUESTION:

Mr. Secretary, under the recently negotiated extension of the steel VRAs, U.S. negotiators were unable to get 60"-wide stainless steel sheet included in the agreement with the EC and only on the "shift watch list" for certain other importers. Because of artificial market conditions (i.e., bankruptcy of the sole U.S. producer) when the initial VRA level was established, our current domestic producers are now forced into production levels far below capacity to allow subsidized foreign steel sheet into this country. Last year, this labor intensive product category saw a 9% drop in prices by foreign producers with an increase from 5.8% of total imports to 7.8% in less than 30 days. What action can we expect from your office to protect against these types of abuses specifically in the 60" example and other similar product lines?

ANSWER:

In our administration of the steel VRAs, the Department of Commerce constantly monitors steel imports for potential shifts into sensitive products. Each VRA contains a provision allowing us to take action whenever such shifting occurs.

The United States Government is aware of the unique circumstances concerning imports of 60"-wide stainless steel sheet, and we appreciate your concern in this matter. The new steel VRAs do include all major foreign sources of this product (the European Community, Japan and Finland).

The U.S. Government has informed all of these parties of its concern in this area, and this product has been specified by name in the U.S.-EC VRA as a product which will be closely monitored against any sudden increase imports.

In our careful examination of trade in these products, we have seen some positive recent trends:

-- In 1988, estimated imports of 60"-wide stainless sheet totaled 20,000 tons.

-- In 1989, imports of this product totaled 13,272 tons, a decrease of approximately 33 percent from 1988.

-- Prices of imports of this product increased 4 percent in the second half of 1989, at a time when other stainless steel prices were declining by 10 percent.

I can assure you that the Department of Commerce will continue to closely monitor imports of this product under the new VRAs. In fact, this issue is on the agenda for the upcoming U.S.-Japan and U.S.-EC steel consultations scheduled for April 1990.

Questions Submitted by Congressman Kolbe

Cotton Ginning

Every three years the Bureau of the Census is required to obtain approval from the OMB for the collection of cotton ginning statistics. I understand that the Bureau of the Census sent a supporting statement to OMB in November, 1989.

The ginning statistics provide valuable information on the size, location and output of the ginning sector. Through these statistics, U.S. producers are given an advantage in the world market by being able to reconcile the final USDA, National Agriculture Statistics Service cotton production estimate with actual production as indicated by ginning reports. This report is also used to indicate how quickly the crop is being harvested in comparison with previous years. In addition to providing an estimate of lint and seed production, the report gives an estimate on the number of gins operating during a specific time period. Finally, the report estimates the number of bales processed per gin, and shows shifts in production from one area to another. This is particularly useful, since may states no longer publish county production estimates.

QUESTION:

When the Department of Commerce submitted the Bureau of the Census budget requests to OMB, did you support continuation of funding for the cotton ginnings report, and if so, does the Bureau remain in support of this report?

ANSWER:

Yes. The budget request to OMB supported continuation of the cotton ginnings report. Subsequent to the OMB submission, the Census Bureau sustained additional budget cuts because of the Gramm-Rudman-Hollings legislation. At that time, the cotton ginnings report was eliminated in FY 1991 in order to fund higher priority economic data collection programs.

QUESTION:

Because many of the statistics included in the cotton ginnings report are not collected by any other source, valuable information about U.S. cotton supplies will be lost. Is it the Department's position that this information is no longer valuable?

ANSWER:

No, but compared with the overall Census data collection program, this is one of the lower priority programs. We viewed the elimination of this program as preferable to taking an across the board reduction.

QJESTION:

As you know, about one-half of the cotton produced domestically is exported annually. Without the information collected by the Bureau of the Census, the U.S. could be put in a situation of being an unreliable world supplier of cotton because of inadequate information on stocks. Does the Department propose an alternative which would provide a reliable source of information to our domestic users of cotton, as well as to the U.S. exporter?

ANSWER:

No.

WEDNESDAY, FEBRUARY 28, 1990.

PATENT AND TRADEMARK OFFICE

WITNESSES

JEFFREY M. SAMUELS, ACTING COMMISSIONER OF PATENTS AND TRADEMARKS

BRADFORD R. HUTHER, ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING

JAMES E. DENNY, ACTING ASSISTANT COMMISSIONER FOR PATENTS

THOMAS P. GIAMMO, ASSISTANT COMMISSIONER FOR INFORMATION SYSTEMS

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

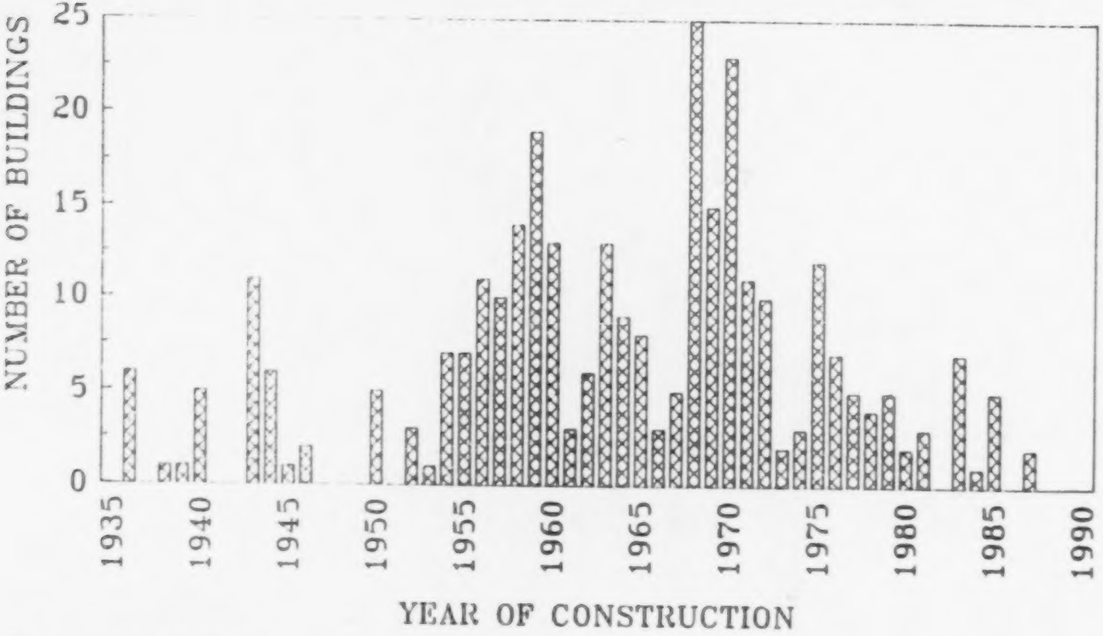
Mr. EARLY. The Committee will come to order.

The first item that we will consider this morning is the request for the Patent and Trademark Office. The request is for $112,027,000 in new budget authority. This amount is an increase of $26,127,000 above the appropriation enacted for the Patent and Trademark Office for fiscal year 1990.

We will insert the budget justification submitted in support of this request into the record at this point.

[The justifications follow:]

NOAA-OWNED BUILDINGS
BY YEAR OF CONSTRUCTION



Based on the 311 buildings
constructed since 1935.
(1 ildings were built prior to 1935)

Prepared September 9

Department of Commerce
Patent and Trademark Office
BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION
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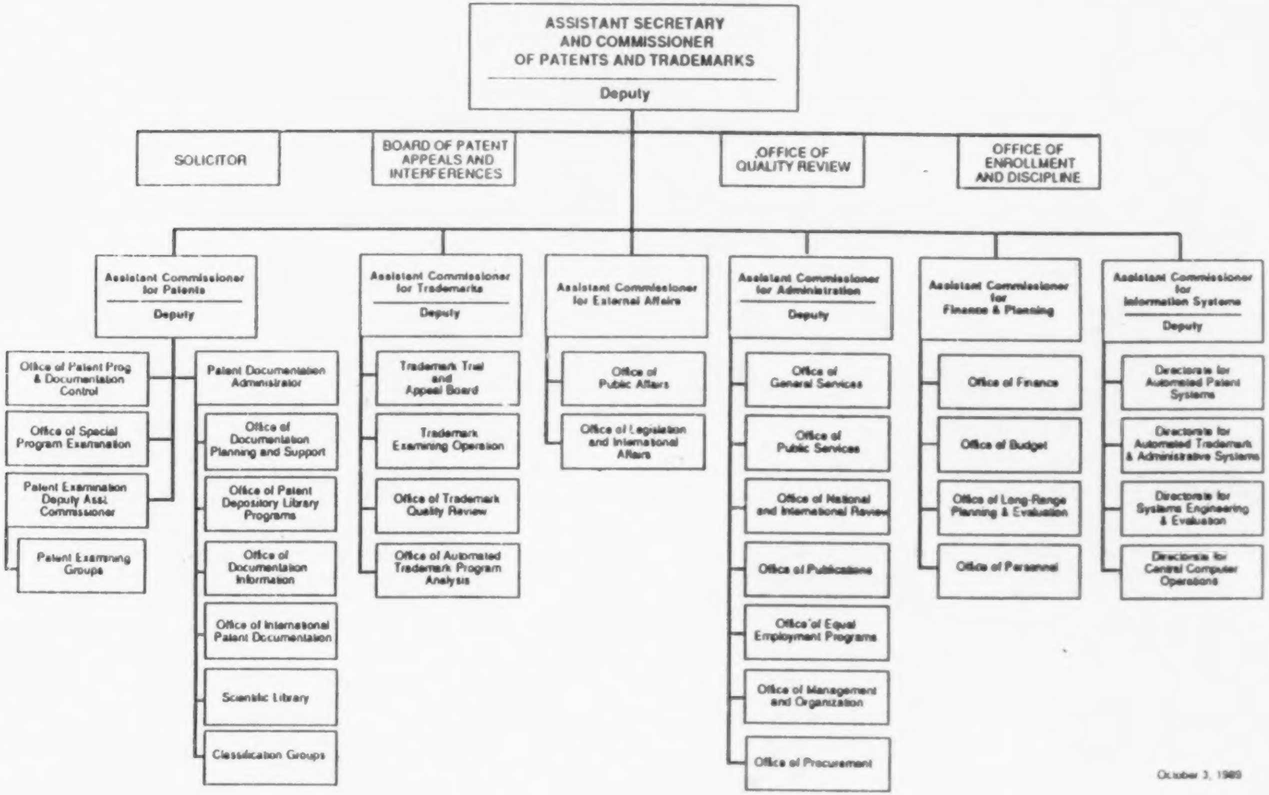
U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE


ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
Deputy
SOLICITOR
BOARD OF PATENT APPEALS AND INTERFERENCES
OFFICE OF QUALITY REVIEW
OFFICE OF ENROLLMENT AND DISCIPLINE
Assistant Commissioner for Patents
Deputy
Office of Patent Prog & Documentation Control
Office of Special Program Examination
Patent Examination Deputy Asst. Commissioner
Patent Examining Groups
Patent Documentation Administrator
Office of Documentation Planning and Support
Office of Patent Depository Library Programs
Office of Documentation Information
Office of International Patent Documentation
Scientific Library
Classification Groups
Assistant Commissioner for Trademarks
Deputy
Trademark Trial and Appeal Board
Trademark Examining Operation
Office of Trademark Quality Review
Office of Automated Trademark Program Analysis
Assistant Commissioner for External Affairs
Office of Public Affairs
Office of Legislation and International Affairs
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Assistant Commissioner for Information Systems
Deputy
Directorate for Automated Patent Systems
Directorate for Automated Trademark & Administrative Systems
Directorate for Systems Engineering & Evaluation
Directorate for Central Computer Operations

October 3, 1989

PTO-1

GENERAL STATEMENT

The Patent and Trademark Office administers the laws relating to patents and trademarks in order to promote industrial and technological progress in the United States and strengthen the National Economy. This mission is accomplished by: examining patent and trademark applications, issuing patents and registering trademarks; disseminating patent and trademark information to the public; and encouraging a domestic and international climate in which intellectual property can flourish. The Office seeks to preserve the integrity of the U.S. patent system which promotes industrial and scientific progress and the Federal trademark system which promotes investment in business and protects consumers, thus strengthening the national economy. Patent laws, which provide for granting inventors the right to exclude all others from making, using, or selling their inventions for 17 years, encourage technological and scientific advancement by providing incentives to create, invest in, and disclose new and useful products and processes. PTO's primary role in administering these laws is to examine patent applications and grant protection for patentable inventions. In addition, PTO is responsible for collecting, assembling, cataloging, publishing, and distributing technical information disclosed in patent grants and, by so doing, has created the world's largest scientific and technical information center. Trademark laws provide for Federal registration and protection of names, symbols, or devices used by businesses to identify and distinguish goods and services offered to the public. Trademarks provide economic benefits by identifying the uniqueness, and integrity of the seller thereby reducing confusion of products and unfair competition. PTO examines trademark applications and grants Federal registration to owners of qualified marks.

Following is a comparison of the 1990 appropriation and the 1991 budget estimate and related data on current employment for the programs of the Patent and Trademark Office:

(Dollar amounts in thousands)

	1990 Appropriation Currently Available		1991 Estimate		Increase/(Decrease)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Salaries and expenses	3,898	$275,877	4,765	$353,647	867	$77,770
Less budgeted offsetting fee collections	...	(189,977)	...	(241,620)	...	(51,643)
Appropriation requested	3,898	$85,900	4,765	$112,027	867	$26,127
	(3,694)		(4,441)		(747)	
1990 FTE Revision	(150)					
1990 Revised FTE Totals	(3,844)					

Note, permanent position numbers in parentheses represent workyears(FTE). In 1991, user fees offset 68 percent of the costs of the PTO programs, with the remaining costs (32 percent) being supported by appropriated funds.

Highlights of the 1991 budget submission to the Congress follow:

1. Maintain patent pendency at 18 months and continue to improve patent quality.

In 1982, the Administration established the goal of reducing patent pendency to 18 months by 1987 while improving patent quality. Continued increases in the number of patent applications and a funding reduction in FY 1986 in response to the Emergency Deficit Control Act forced revision of the goal to 18 months pendency by 1989. The goal focuses on the average pendency for all patent applications. The goal was reached in fiscal year 1989 and the main purpose of the 1991 initiatives is to maintain patent pendency at 18 months while improving patent quality.

1991 Initiatives

Based on experience to date, the number of patent applications filed will grow to 162,000 and 177,000 receipts in FY 1990 and FY 1991, respectively. The FY 1991 request is based on this increased workload. In contrast, the FY 1990 submission assumed 140,000 receipts. The FY 1991 submission, therefore, requests sufficient resources to process the anticipated increase in the number of patent applications in all stages of the patent examination process -- pre-examination processing for national and international (PCT) applications, processing of international applications under Chapter I and II of the PCT, examination of national application by professional staff with supporting clerical staff, and patent printing. Pre-examination functions will continue second shift operations initiated in FY 1988.

Initiatives supportive of patent quality are proposed for 1991. Initiatives supportive of patent quality include an expansion of the Patent Quality Review Program, enhanced examiner training, and improvements to the integrity of the search file through expanded classification activities. The 1991 initiatives to maintain patent pendency at 18 months and to improve quality will be fully fee funded.

2. Automate the patent and trademark processes by the 1990's.

In response to Public Law 96-517, an Automation Master Plan was forwarded to Congress in December 1982. It described planned efforts to improve patent and trademark operations with computer technology. As a result of substantial progress towards some goals and the need to revise others, second and third editions of the Master Plan were prepared and submitted to Congress in February 1986 and April 1987.

1991 Initiatives

The PTO's implementation of the Automated Patent System (APS) was reviewed by an Industry Review Panel (IRP) which recommended management and technical revisions to the APS. As a result of the IRP recommendations, a revised APS development and deployment plan was prepared. Funds are proposed here to support the deliberate deployment process reflected in that plan. Several initiatives are proposed in 1991 which complement the APS plan and respond to recommendations of the IRP. Most notable is the initiative to establish a permanent funding base for the APS contracts management staff.

Trademark automation has long been operational through the T-Search and TRAM systems. Initiatives for T-Search allow for the replacement of aging terminals in the trademark examining area and an expansion of T-Search services for use by the public and by a growing cadre of trademark attorney advisors. A permanent funding base is also sought for the provision of T-Search services to the public. The initiatives are totally supported by user fees.

Management and administrative systems are proposed for expansion to permit the upgrade and redesign of our basic PALM and TRAM administrative systems to provide for a uniform administrative system throughout the PTO, and to expand our data tape sales program.

3. Strengthen worldwide protection of intellectual property.

Effective intellectual property protection is an increasingly important factor for U.S. businesses competing in the world market. Effective protection for trademarks is necessary to build and protect reputations for quality goods and services; effective copyright protection is necessary to prevent piracy of U.S. origin books, films, recordings, and software; and effective patent protection is necessary to recover the costs of research and development of new products and processes. The PTO continues efforts to increase the effectiveness of intellectual property protection in the U.S. and abroad. Multilaterally, the PTO is assisting the U.S. Trade Representative (USTR) in advocating the establishment of standards for protection and enforcement mechanisms within the framework of the General Agreement on Tariffs and Trade (GATT) and assisting the Department of State in efforts to harmonize patent and trademark laws being conducted by the World Intellectual Property Organization (WIPO). Bilaterally, the PTO is assisting USTR in "special 301" process and trade consultations with other countries such as Japan and the Soviet Union. In addition, the PTO provides training on intellectual property laws and administration to nationals of developing countries. Domestically, the PTO advocates enactment of improvements to U.S. intellectual property laws.

1991 Initiatives

No new initiatives are requested for this program.

4. Maintain trademark pendency.

In 1985 [illegible] TO achieved a Departmental goal of reducing trademark pendency to three months to first action and 13 months to disposal. This goal was sustained in 1986, 1987, 1988 and 1989. The goal in 1990 and beyond, in view of the effect that the Trademark Law Revision Act of 1988 will have on pendency for filings under the intent-to-use provisions of the Act, is to maintain the reduced first action pendency period at three months and the reduced disposal pendency for all filings under use provisions of the Act at thirteen months, with timely disposal of all intent-to-use filings. All trademark programs and new initiatives are fully supported by user fees.

1991 Initiatives

The implementation of the new Intent-to-Use legislation in November 1989 is expected to yield a 25 percent increase in workload. Trademark applications are estimated to be 100,500 in 1990 and 106,500 in 1991. The 1990 budget assumed receipts of 80,400. To address this considerable increase in workloads and to maintain reduced pendency periods, 1991 initiatives are proposed for the pre-examination, examination, and post-examination functions. The Trademark attorney staff will be expanded by the creation of three new Law Offices comprised of 48 trademark attorneys and 41 support staff. Pre- and post-examination functions must similarly be increased in order to maintain a balance in all production areas. The expected increase in examining attorney production will result in an increase in the number of cases appealed to the Trademark Trial and Appeal Board. Additional resources are accordingly requested for the TTAB.

5. Maintaining a balance between program and support functions.

Although not a goal or objective, this categorization of requirements addresses the need to maintain an essential level of support services for the above four direct program goals. The initiatives which follow are necessary complements to our direct programs and ensure the success of the direct programs.

1991 Initiatives

Space for employees and workstations remains a huge problem. The 1991 request will include an initiative to fund a substantial increase in space to accommodate existing and projected staff and workstations. Procurement and personnel services must also be expanded due to increased workload. The personnel initiative is supported by the previously established personnel employee/office employee ratio of 1:60.

6. Increase in user fee collections.

Increases in patent fees were implemented for the 1989-1991 fee cycle to reflect changes in the Consumer Price Index from the previous three-year period. The budget assumed an increase of 10.3 percent for patent fees. Increased fee collections reflect the growth in patent and trademark applications and the greater cost of providing services and materials to PTO customers.

The proposed 1991 changes to the 1990 appropriation by budget activity are:

(dollar amounts in thousands)

Activity	Description	Permanent Positions	Amount	Page No.
Adjustments to Base	Annualization of 1990 pay increase; inflationary adjustments; other decreases	24	$13,033	PTO- 12
Patent Process	Maintain 18-month patent pendency	321	17,313	PTO- 25
	Clerical support for maintaining reduced pendency	264	8,936	PTO- 30
	Processing increased number of interferences	5	268	PTO- 36
	Enhanced patent printing	...	4,641	PTO- 39
	Patent process automation initiatives	...	13,659	PTO- 27
	Subtotal	590	44,817	
Trademark Process	Maintain reduced trademark pendencies	118	3,149	PTO- 46
	Trial and Appeal Board support	8	357	PTO- 51
	Enhanced trademark printing	...	126	PTO- 54
	Trademark process automation initiatives	...	1,481	PTO- 48
	Subtotal	126	5,113	
Information Dissemination	Increased services workload and public search room services	50	1,914	PTO- 61
	Increased workload for patent post examination	20	685	PTO- 65
	Patent search file integrity and examiner search services	25	2,829	PTO- 68
	Information dissemination automation initiatives	...	(686)	PTO- 71
	Subtotal	95	4,742	
Executive Direction and Administration	Maintain patent attorney roster	1	72	PTO- 81
	Maintain personnel staffing ratio	8	729	PTO- 84
	Essential program support	4	262	PTO- 87
	Increased workload for patent quality review	1	125	PTO- 95
	Space acquisition and management	...	6,021	PTO- 98
	Executive direction automation initiatives	18	2,856	PTO- 90
	Subtotal	32	10,065	
	Total Changes	867	77,770	
Offsetting Fee Collections	1991 Receipts	...	(51,643)	PTO-113
	Net Changes	867	26,127	

Actual and projected key workload indicators are as follows:

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
1. Patent Process:				
Regular patent applications (excluding designs)				
Applications received	137,069	151,331	162,000 1/	177,000
Application disposals	134,418	145,875	147,400	158,600
Total applications in office (end of year)	240,347	244,734	257,817	284,603
Patent grants printed	77,844	96,868	95,751	101,000
Total pendency in Office (in months)	19.9	18.4	18.9	18.5
2. Trademark Process:				
Applications received (including extra classes)	76,813	83,169	100,500 1/	106,500
Application disposals by examiners	75,303	80,275	94,812	100,500
Total applications in office (end of year)	90,079	99,337	112,780	130,560
Trademark registrations printed	46,704	51,802	64,000	67,600
Pendency to first action (in months)	2.5	2.8	3.0	3.0
Pendency to disposal (in months)	13.3	13.8	13.0	13.0

1/ Revised to reflect currently anticipated filing levels.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.	Summary of adjustments to base and built-in changes		Personnel	Amount	Personnel	Amount
	Appropriation Enacted for 1990	Pos./BA			3,898	$85,900
		FTE/Obl.			3,844	
	Sequester Applied for 1990	Pos./BA			...	0
		FTE/Obl.			...	
	Appropriation currently available for 1990:					
	General Fund	Pos./BA			3,898	$85,900
		FTE/Obl.			3,844	
	Budgeted Offsetting Fee Collections					180,032
	Sequestered Offsetting Fee Collections					(2,520)
	Federal Reimbursements					200
	1989 Patent Surplus Fee Collections					12,265
PTO-12	Adjustments to base and built-in changes:					
	Adjustment for 1990 pay increase and related costs	Pos./BA	...	5,156		
		FTE/Obl.	...			
	Other increases	Pos./BA	24	8,979		
		FTE/Obl.	50			
	Other decreases	Pos./BA	...	(1,102)		
		FTE/Obl.	(150)			
	Subtotal, adjustments to base and built-in changes	Pos./BA			24	13,033
		FTE/Obl.			(100)	
	1991 Base	Pos./BA			3,922	288,910
		FTE/Obl.			3,744	

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
PTO-20 Patent Process:											
Examination-professional	Pos./BA	1,648	$142,598	1,741	$108,684	1,741	$113,549	2,062	$144,521	321	$30,972
	FTE/Obl.	1,623	134,482	1,560	106,527	1,560		1,829		269	
Examination-clerical	Pos./BA	697	23,964	753	22,444	756	24,265	1,020	33,201	264	8,936
	FTE/Obl.	693	22,852	746	22,648	756		986		230	
Appeals and Interferences	Pos./BA	93	6,710	100	5,850	105	6,589	110	6,857	5	268
	FTE/Obl.	94	6,443	92	5,903	97		101		4	
Patent printing	Pos./BA	...	25,948	...	20,117	...	21,277	...	25,918	...	4,641
	FTE/Obl.	...	25,835	...	20,300	...		...		...	
Subtotal	Pos./BA	2,438	199,220	2,594	157,095	2,602	165,680	3,192	210,497	590	44,817
	FTE/Obl.	2,410	189,612	2,398	155,378	2,413		2,916		503	
PTO-42 Trademark Process:											
Examination of trademarks	Pos./BA	267	32,534	278	13,902	279	14,278	397	18,908	118	4,630
	FTE/Obl.	268	20,097	264	27,445	272		344		72	
Trial and Appeal Board	Pos./BA	34	2,131	36	1,719	37	1,758	45	2,115	8	357
	FTE/Obl.	35	1,857	37	1,743	39		45		6	
Trademark printing	Pos./BA	...	1,010	...	825	...	879	...	1,005	...	126
	FTE/Obl.	...	959	...	837	...		...		...	
Subtotal	Pos./BA	301	35,675	314	16,446	316	16,915	442	22,028	126	5,113
	FTE/Obl.	303	22,913	301	30,025	311		389		78	
PTO-57 Information Dissemination:											
Customer services	Pos./BA	122	15,519	99	8,470	105	8,647	155	10,561	50	1,914
	FTE/Obl.	121	14,038	106	8,738	112		154		42	
Publication services	Pos./BA	93	4,687	121	4,031	124	4,216	144	4,901	20	685
	FTE/Obl.	100	4,411	112	4,161	116		131		15	
Data and document retrieval systems	Pos./BA	279	34,608	295	31,199	295	32,160	320	34,303	25	2,143
	FTE/Obl.	304	34,029	288	32,486	297		317		20	
Subtotal	Pos./BA	494	54,814	515	43,700	524	45,023	619	49,765	95	4,742
	FTE/Obl.	525	52,478	506	45,385	525		602		77	

Comparison by activity (continued):

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
PTO-74 Executive Direction and Administration:											
Commissioner	Pos./BA	6	748	9	506	9	594	9	594	0	0
	FTE/Obl.	8	660	7	551	7		7		0	
Solicitor	Pos./BA	26	1,985	25	1,493	25	1,698	26	1,770	1	72
	FTE/Obl.	24	1,886	23	1,612	23		24		1	
Legislation & international affairs	Pos./BA	19	1,670	29	1,537	29	1,786	29	1,786	0	0
	FTE/Obl.	20	1,546	25	1,673	25		25		0	
Management planning	Pos./BA	130	6,876	119	5,566	119	6,181	127	6,910	8	729
	FTE/Obl.	121	6,825	122	6,011	123		129		6	
Administrative services	Pos./BA	78	3,879	51	2,692	56	3,096	60	3,358	4	262
	FTE/Obl.	73	3,582	73	2,931	78		81		3	
Automation	Pos./BA	217	29,664	223	23,238	223	23,270	241	26,126	18	2,856
	FTE/Obl.	220	26,503	221	24,735	221		249		28	
Quality review	Pos./BA	15	1,239	16	1,125	16	1,190	17	1,315	1	125
	FTE/Obl.	15	1,228	15	1,169	15		16		1	
Space Acquisition and Management	Pos./BA	0	0	3	22,479	3	23,477	3	29,498	0	6,021
	FTE/Obl.	0	0	3	22,679	3		3		0	
Subtotal	Pos./BA	491	46,061	475	58,636	480	61,292	512	71,357	32	10,065
	FTE/Obl.	481	42,230	489	61,361	495		534		39	
Subtotal, Patent and Trademark Office	Pos./BA	3,724	335,770	3,898	275,877	3,922	288,910	4,765	353,647	843	64,737
	FTE/Obl.	3,719	307,233	3,694	292,149	3,744		4,441		697	
Revisions to 1990 FTE				150							
Total requirements	Pos./BA	3,724	335,770	3,898	275,877	3,922	288,910	4,765	353,647	843	64,737
	FTE/Obl	3,719	307,233	3,844	292,149	3,744		4,441		697	
Offsetting fee collections	BA	-	192,556	-	180,232	-	193,521	-	241,620	-	48,099
	Obl.	-	197,238	-	199,899						
Financing from prior year funds	BA	-	34,214	-	12,265						
	Obl.		...		...						
Fees sequestered	BA		...	+	2,520						
	Obl.		...		...						
Appropriation requested	BA		109,000		85,900		95,389		112,027		16,638
	Obl.		109,995		92,250						

Department of Co merce
Patent and Trademar Office
Salaries and Exp nses
SUMMARY OF FINA CING
(Dollar Amounts in T ousands)

	1989 Actual Amount	1990 Currently Available Amount	1991 Base Amount	1991 Estimate Amount	Increase/ (Decrease) From 1991 Base Amount
Total Obligations	$307,233	$292,149	$288,910	$353,647	$64,737
Financing:					
Offsetting collections from:					
Federal funds	- 234	200	- 200	- 200	0
Trust funds	- 0	0	- 0	- 0	0
Non-Federal sources	- 191,019	180,032	- 193,321	- 241,420	48,099
Change in Unfilled Customer Orders	- 1,303	- 0	- 0	- 0	0
Recoveries	- 5,316	- 0	- 0	- 0	0
Unobligated balance, start of year	- 28,898	- 28,537	- 0	- 0	0
Unobligated balance transferred	- 0	- 0	- 0	- 0	0
Unobligated balance, end of year	+ 28,537	+ 0	+ 0	+ 0	0
Unobligated balance lapsing	+ 0	+ 0	+ 0	+ 0	0
Plus: Reimbursable Sequester	+ 0	+ 2,520	+ 0	+ 0	0
Budget Authority	109,000	85,900	95,389	112,027	16,638

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	(Increase/Decrease)		
Adjustments:	Perm. Pos.	FTE	Amount
Adjustment for 1990 Pay Increase and Related Costs	0	0	$5,156
Adjustment for 1991 Pay Increases and Related Costs	0	0	2,980
Management savings (A-76)	24	24	(619)
Non-recurring FTE	0	(150)	0
Subtotal adjustments	24	(126)	7,517
Estimated Cost Changes:			
Full-year cost in 1991 for positions financed for part year in 1990	0	26	294
Extra compensable day	0	0	600
Civil Service Retirement System	0	0	(483)
Federal Employees' Retirement System	0	0	910
Thrift Savings Plan	0	0	138
Federal Insurance Contributions Act (OASDI)	0	0	476
Medicare	0	0	36
Health Insurance Premium	0	0	1,102
Employees' compensation Fund	0	0	277
Rental payments to GSA	0	0	998
Communications, utilities, and miscellaneous charges	0	0	(200)
Printing and reproduction	0	0	1,368
Subtotal, estimated cost changes	0	26	5,516
Total Adjustments to Base	24	(100)	13,033

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
1990 Fee Collections:		
Fee collections proposed in 1990 budget request	0	$180,032
Sequester applied in 1990	0	(2,520)
1989 Surplus fee collections	0	12,265
Federal reimbursements	0	200
Subtotal	0	189,977
Adjustment for 1990 pay increase and related costs:		
Total cost in 1990 of pay increase	0	4,157
Less amount absorbed	0	(4,157)
Anticipated 1990 pay increase supplemental	0	0
Amount in 1991 to provide full-year cost of pay increase	0	5,543
Less amount absorbed	0	(387)
Subtotal, adjustment for 1990 pay increase	0	5,156

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, PTO is absorbing the full cost of this pay increase.

	Perm. Pos.	Amount
Other Increase		
Adjustment for 1991 pay increase and related costs	0	2,980
Full-year cost in 1991 of positions financed for part year in 1990	0	294
One additional compensable day	0	600
Federal Employees' Retirement System	0	910
Thrift Savings Plan	0	138
Federal Insurance Contribution Act (OASDI)	0	476
Medicare	0	36
Health insurance premium	0	1,102
Employees' Compensation Fund	0	277
Rent payments to GSA	0	998
Printing and reproduction	0	1,368
Subtotal, other increases	0	9,179

	Perm. Pos.	Amount
Adjustment for 1991 pay increases and related costs:		
Total cost in 1991 of general pay increase	0	4,670
Less amount absorbed	0	-(2,335)
Subtotal, adjustment for 1991 general pay increase	0	2,335
Total cost in 1991 of SES pay increase	0	1,290
Less amount absorbed	0	(645)
Subtotal, adjustment for 1991 SES increase	0	645
Total adjustment for 1991 pay increases	0	2,980

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of the increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

Full-year cost in 1991 of positions financed for part year in 1990:

An additional $294,000 is required in 1991, to cover the full-year cost of positions financed for part year in 1990. The lapsed funds are for twenty six staff years. This provides full-year financing with a five percent lapse.

	Perm. Pos.	Amount
Annual salary of new positions in 1990	131	$5,768,281
Less 5 percent lapse	(-7)	(288,414)
Full year cost of personnel compensation	124	5,479,867
Personnel benefits at 26 percent	0	1,424,242
Full-year cost of personnel compensation and benefits	124	6,904.109
Compensation and benefits included in 1990 appropriation	(98)	(6.610.000)
1991 adjustment to base	26	294,109

More/Less compensable days

The $600,000 for an additional day in fiscal year 1991 was calculated by dividing the fiscal year 1990 estimate for personnel compensation and benefits by the 260 compensable days in 1990 and multiplying by one.

Federal Employees' Retirement System

The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 35.1 percent in 1990 to 40.4 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97% to 13.00%. The computation of FERS basic contributions is:

Pay subject to retirement systems ($130,081,000)	
Basic benefits cost in 1991 (130,081,000 x .404 x .13)	$6,831,854
Basic benefits cost in 1990 (130,081,000 x .351 x .1297)	-5,921,899
Increase in basic contributions	909,955

Thrift Plan

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. We estimate the percentage of payroll coverage to rise from 35.1% in 1990 to 40.4% in 1991. We estimate the agency's contribution will remain at 2%. The increased cost for contributions to the Thrift Savings Plan is:

Payroll subject to retirement system ($130,081,000)	
Thrift Plan benefits cost in 1991 ($130,081,000 x .404 x .02)	$1,051,054
Thrift Plan benefits cost in 1990 ($130,081,000 x .351 x .02)	-913,169
Increase in Thrift Saving plan	137,885

Federal Insurance Contribution Act (OASDI)

Employees covered by FERS are covered by Old Age, Survivor, and Disability Insurance (OASDI). The percentage of payroll covered by FERS is estimated to rise from 93.4% in 1990 to 95.3% in 1991. In addition, the OASDI tax rate will increase from 6.17% in FY 1990 to 6.20% in 1991. As a result OASDI contributions will increase.

OASDI:

FERS payroll subject to FICA Tax in 1990 ($130,081,000 x .351 x .934)	$42,644,975		
FERS OASDI tax in 1990 ($42,644,975 x .0617)			$2,631,195
FERS payroll subject to FICA Tax in 1991 ($130,081,000 x .404 x .953)	$50,082,746		
FERS OASDI tax in 1991 ($50,082,746 x .062)			3,105,130
Increase (1991-1990)			473,935
Other Payroll not covered by retirement	$1,615,000		
Other Payroll subject to FICA tax in 1990 ($1,615,000 x .934)		$1,508,410	
OASDI tax in 1990 ($1,508,410 x .0617)			$93,069
Other payroll subject to FICA tax in 1991 ($1,615,000 x .953)	$1,539,095		
OASDI tax in 1991 ($1,539,095 x .62)			95,424
Increase (1991-1990)			2,355
Total OADSI increase			476,290

Medicare

All employees are subject to Medicare contributions. The rate will remain at 1.45%, but the percentage of payroll subject to FICA will increase from 93.4% in 1990 to 95.3% in 1991.

Total payroll	$131,696,000		
Total payroll subject to FICA in 1990 ($131,696,000 x .934)		123,004,064	
Total payroll subject to FICA in 1991 ($131,696,000 x .953)		125,506,288	
Increase in payroll subject to FICA (1991-1990)		2,502,224	
Increase in Medicare Tax ($2,502,244 x .0145)			36,282

Health insurance premium

The cost of the Government's contribution to the Federal Employees' Health Insurance premium increased by 20.8% effective January 1, 1989. This increase requires an additional $1,102,000 calculated on the 1990 base of $4,329,000.

Employees' Compensation Fund

The increase of $277,000 is for the repayment of the Employees' Compensation Fund for higher costs in the year ending on June 30, 1989 than in the year ending June 30, 1988. The 1989 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in 1991 pursuant to Public Law 86-767 as amended.

Rent payments to GSA

An estimate of $23,677,000 is required for 1991 currently occupied space. The estimate of $22,679,000 was subtracted from the 1990 estimate for a 4.4 percent increase of $998,000.

Printing and reproduction

The $1,368,000 for printing consists of $180,600 for non-patent printing, $27,200 for patent and trademark file wrappers and $1,160,045 for patent printing. The Government Printing Office forecasts a printing increase of 7.0 percent. This percent was applied to the non-patent printing base of $2,580,000 for an increase of $180,600.

In addition, the printing cost of file wrappers used for storage of patent and trademark application materials increased by $27,200 representing an 11.9 percent increase over the file wrapper base of $288.000. The cost of patent printing represents a 5.7 percent increase to the 1990 patent printing base of $20,300,000. The increase of $1,160,045 is based on provisions of the patent printing data base contract.

	Perm. Pos.	Amount
Other Decreases:		
Management Savings	24	(619)
Civil Service Retirement System	0	(483)
Federal Telecommunications System	0	(200)
subtotal, other decreases	0	(1,302)

Management Savings

The savings of $619,000 are estimates resulting from an anticipated A-76 study.

Civil Service Retirement System

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll employees who are covered by retirement system will drop from 64.9 percent for CSRS in 1990 to 59.6 percent in 1991. Computation for CSRS follows:

Payroll subject to retirement system ($130,081.000)	
CSRS cost in 1991 ($130,081,000 x .596 x .07)........	$5,426,979
CSRS cost in 1990 ($130,081,000 x .649 x .07)........	-5,909,580
Decrease in CSRS........	-$ 482,601

Federal Telecommunications System

Following implementation of FTS-2000, GSA anticipates lower rate charges of $200,000 for telephone services.

Appropriation Language and Code Citations

1. For necessary expenses of the Patent and Trademark Office, including the defense of suits instituted against the Commissioner of Patents and Trademarks,

15 U.S.C. 1051-1127
15 U.S.C. 1511
35 U.S.C. 1-4, 6-42, 141-145, 376
44 U.S.C. 1337-1338

15 U.S.C. 1051-1127 contains provisions of the Trademark Act of 1946 that govern the administration of the trademark registration system of the Patent and Trademark Office.

15 U.S.C. 1511 states that the Patent and Trademark Office is under the jurisdiction and supervision of the Department of Commerce.

35 U.S.C. 1-4, 6-42, 141-145 contains basic authorities for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments. Revenues from fees are available to the Commissioner to carry out, to the extent provided for in appropriation acts, the activities of the office. Since fiscal year 1983, all fees are available to the Patent and Trademark Office.

35 U.S.C. 376 authorizes the Patent and Trademark Office to charge international fees for activities undertaken pursuant to the Patent Cooperation Treaty.

44 U.S.C. 1337-1338 contains authority to print patents, trademarks, and other matter relating to the business of the Office.

2. $85,900,000 and, in addition, such fees as shall be collected pursuant to 15 U.S.C. 1113 and 35 U.S.C. 41, 376,

15 U.S.C. 1113(a) provides that: "The Commissioner of Patents and Trademarks will establish fees...for the registration of a trademark or other mark and for all other services performed by and materials furnished the Patent and Trademark Office related to trademarks and other marks."

35 U.S.C. 41(a) provides that: "The Commissioner of Patent and Trademarks will establish fees for the processing of an application for a patent,...for maintaining a patent in force, and for providing all other services and materials related to patents."

35 U.S.C. 42(c) provides that: "Revenues from fees will be available to the Commissioner of Patents and Trademarks to carry out, to the extent provided for in appropriation Acts, the activities of the Patent and Trademark Office" and that "fees available to the Commissioner under Section 31 (15 U.S.C. 1113(a)) of the Trademark Act of 1946 shall be used exclusively for the processing of trademark registrations and other services and materials related to trademarks."

35 U.S.C. 376 authorizes the payment to the Patent and Trademark Office of international fees collected pursuant to the Patent Cooperation Treaty.

3. to remain available until expended.

Public Law No. 100-703, section 2 provides that appropriations authorized under this Act and such fees as may be collected can be carried over and remain available until expended.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Patent Process

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination-professional	Pos./BA	1,648	$142,598	1,741	$108,684	1,741	$113,549	2,062	$144,521	321	$30,972
	FTE/Obl.	1,623	134,482	1,560	106,527	1,560		1,829		269	
Examination-clerical	Pos./BA	697	23,964	753	22,444	756	24,265	1,020	33,201	264	8,936
	FTE/Obl.	693	22,852	746	22,648	756		986		230	
Appeals and Interferences	Pos./BA	93	6,710	100	5,850	105	6,589	110	6,857	5	268
	FTE/Obl.	94	6,443	92	5,903	97		101		4	
Patent printing	Pos./BA	...	25,948	...	20,117	...	21,277	...	25,918	...	4,641
	FTE/Obl.	...	25,835	...	20,300	...		...		...	
Subtotal	Pos./BA	2,438	199,220	2,594	157,095	2,602	165,680	3,192	210,497	590	44,817
	FTE/Obl.	2,410	189,612	2,398	155,378	2,413		2,916		503	
Revisions to 1990 FTE				79							
Total requirements	Pos./BA	2,438	199,220	2,594	157,095	2,602	165,680	3,192	210,497	590	44,817
	FTE/Obl.	2,410	189,612	2,477	155,378	2,413		2,916		503	
Offsetting fee collections	BA	-	125,922	-	116,057	-	126,381	-	155,551	-	29,170
	Obl.	-	130,137	-	122,378						
Financing from prior year funds	BA	-	13,098	-	12,265						
	Obl.		...		...						
Fees sequestered	BA		...	+	1,624						
	Obl.		...		...						
Net request	BA		60,200		30,397		39,299		54,946		15,647
	Obl.		59,475		33,000						

Department of Commerce
Patent and Trademark Office
Salaries and Expenses

JUSTIFICATION OF PROGRAM AND PERFORMANCE

(Obligations in Thousands)

Activity: Patent Process

Goals

- Maintain patent pendency at 18 months and improve patent quality.
- Encourage innovation through the efficient administration of patent laws enacted by Congress in accordance with Article 1, Section 8 of the Constitution, thus enhancing the economic, scientific and competitive strength of the Nation.
- Automate the patent process.

Objectives

- Issue valid patents promptly to secure inventors' intellectual property rights.
- Ensure the prompt issuance of printed patents, which (1) results in the rapid dissemination of new technology; (2) encourages early investment in innovation; and (3) accelerates technological development.
- Provide prompt and efficient services to the public, including the timely and effective adjudication of appeals and interferences before the Board of Patent Appeals and Interferences.
- Continue implementation of PTO's Automation Master Plan, which will result in the automation of patent application processing procedures, classification activities and patent search and retrieval functions.

Base Program

Examination - Professional

The examination of patent applications determines the patentability of claimed inventions. Based on searches of prior art (previous U.S. and foreign patents, technical literature and reports) and on the application of patent law and court decisions, patent examiners either allow or reject an application, prepare briefs on applications appealed to the Board of Patent Appeals and Interferences, make holdings of abandonment, recommend institution of interference proceedings to determine priority of ownership, and rule on certain other post-interference issues such as interference estoppel. In the course of examining a patent application an examiner will make an initial determination on the allowability of a patent (first action) frequently followed by several subsequent communications with the applicant until the application is either abandoned or allowed for issue as a patent (disposal). This activity supports the goal to "Maintain patent pendency to 18 months and improve patent quality". International patent applications are also treated under the PCT whereby international search reports and IPER's are prepared by examiners. This line item also includes funding for patent automaion activities within the PTO through implementation of the Automated Patent System (APS).

Examination - Clerical

Examination clerical is comprised of two parts: the patent examinating corps clerical support staff; and pre-examination processing by the Correspondence and Mail Division and the Office of National and International Application Review (ONIAR). The corps clerical operation provides clerical support to the patent examiners. The Correspondence and Mail Division and ONIAR process and microfilm applications, collect fees and ensure that applications meet all formal requirements before sending them to the examiners. The International Services Division of ONIAR also provides all special handling required under the Patent Cooperation Treaty. File services provide for the retrieval of necessary files from off-site storage facilities. The entire pre-examination function directly supports the 18 month pendency goal.

Board of Patent Appeals and Interferences

The Board reviews disputed examiner decisions with respect to patentability, and adjudicates questions regarding priority of invention. The decisions of the Board are subject to judicial review. Dissatisfied parties may institute civil action in U.S. District Court or appeal to the Court of Appeals for the Federal Circuit. This activity directly supports the goal to "maintain patent pendency at 18 months while improving patent quality."

Patent Printing

This post-examination function provides for printing of patents after they have been allowed by the examiners and the appropriate fee has been paid. This function directly supports the goal of maintaining 18 months patent pendency while improving the quality of issued patents.

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Regular Patent Applications (exc designs):				
Applications in Office (start-of-year)	230,551	240,347	244,734	257,817
Applications received	137,069	151,331	162,000 1/	177,000
Application disposals by examiners:				
Allowed for grant	(87,870)	(98,472)	(99,300)	(107,600)
Abandoned	(46,351)	(47,218)	(47,700)	(50,600)
Statutory invention registration (SIRs)	(197)	(185)	(400)	(400)
Total	(134,418)	(145,875)	(147,400)	(158,600)
Change in printing inventory	7,145	(1,069)	(1,517)	8,386
Total applications in Office (end-of-year)	240,347	244,734	257,817	284,603
First actions	127,180	136,722	164,500	169,500
Pendency in Office, excluding appeals and interference applications (in months)	19.4	17.9	18.4	18.0
Total pendency in Office, all app (in months)	19.9	18.4	18.9	18.5
Patent Cooperation Treaty:				
Applications received in Receiving Office	4,242	5,599	6,000 1/	7,200
Appln requirements rec'd by Designated Office	3,489	4,355	7,800 1/	8,000
Applications received Chapter II IPEA	838	1,959	2,000 1/	2,500
Pre-examination:				
Mail documents processed	4,807,089	4,661,794	5,328,000	5,605,056
Files Processed	253,901	137,445	327,280	350,007
Applications Microfilmed	...	...	174,900	190,800
Patent printing:				
Patent grants obligated (excludes designs)	79,698	95,196	95,954	102,000
Patent grants printed (excludes designs)	77,844	96,868	95,751	101,000
Design Patents:				
Applications received	11,114	11,975	12,900 1/	13,800
Allowed or abandoned	8,398	9,918	12,400	14,200
Design patent grants printed	5,740	5,844	7,300	9,300
Total pending end-of-year	27,852	31,001	32,621	32,562
First actions	8,094	11,734	14,200	17,100

1/ Revised to reflect currently anticipated filing levels

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Appeals:				
Cases received	4,270	3,829	5,009	5,300
Cases disposed	5,809	5,594	4,600	4,797
Pending end-of-year	6,307	4,542	4,951	5,454
Interferences:				
Cases received	196	209	200	215
Cases disposed	182	166	175	190
Pending end-of-year	343	386	411	436

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination - Professional	Pos./BA	1,741	$113,549	2,062	$144,521	321	$30,972
	FTE	1,560		1,829		269	

This increase consists of examination of patents (321 permanent positions, 269 FTE and $17,313) and patent automation ($13,659).

Examination of Patents	Positions	FTE	Amount
Examination of Patents	321	269	$15,015
Expand Patent Academy	0	0	$359
Project 4000	0	0	$1,939
Total	321	269	$17,313

Examination of Patents (321 permanent positions, 269 FTE, $17,313,000):
This increase along with base resources are required to address the increase in the number of patent applications filed from 140,000 in 1990 to 177,000 cases currently estimated in 1991. This initiative supports a level of effort needed to maintain the goal of 18 months average total pendency in 1991 while improving the quality of issuing patents. This increase will ensure that the PTO continues to examine utility, design and plant patent applications on a timely basis. The PTO will continue to screen patent applications for national security and issue foreign filing licenses. The PTO will also continue to reexamine issued patents, process international patent applications under the Patent Cooperation Treaty (PCT), issue statutory invention registrations, and process patent term restoration applications.

The PTO reached the 18 month pendency goal in 1989. This increase is necessary to enable the PTO to maintain the reduced pendencies despite increased filings.

The net increase of 321 positions, 269 FTE and $15,015,000 is accomplished by new hires of 375 examiners offset by an estimated 212 attritions. Resources are associated with the higher workloads. This increase also includes the gainsharing program for the professional corps. This is a three year program (1989 - 1991) designed to increase production quality and timeliness in the patent examination process and thus avoid greater staff expansions.

Enhance Patent Academy ($359,000):
Extensive studies and evaluations were conducted to ensure that PTO could withstand the increase of 375 hires. The results of these studies concluded the need for enhancing and expanding the Patent Academy to permit assimilation of large numbers of new hires. This expansion will include more concentrated training on the use of commercial data bases, the use of contracted instructors to teach the initial training class and trainer instruction for primary examiners teaching at the Patent Academy. The ability of the PTO to absorb 375 hires in 1991 is dependent, in part, on securing added resources for expanded examiner training and for providing clerical assistants in each Art Unit.

Project 4000 ($1,939,000):
An increase of $1,939,000 is requested to provide office automation capabilities to the Patent Examining Corps. PTO's Project 4000 proposes the distribution of text search-word processing terminals and related systems components to support examiners and related staff by providing:

1) Direct access to text searching of U.S. patents and commercial data bases as part of the examination process;
2) Word processing of office actions and other documents, with the ability to transfer patent data directly from the text data bases into the examiner office actions;
3) Direct access to the PALM database of patent application and production data;
4) Other microcomputer functions such as production calculations for managers, special genetic searching programs, chemical structure software, etc., and,
5) Networking functions such as electronic mail and document transfer.

This project is necessitated for three purposes. The first is patent quality: direct access by every examiner to text searching capabilities increases the quality of the examiners search. The second purpose is improved efficiency: efficiency is enhanced by having the examiner avoid waiting for an available text terminal in a cluster configuration. The third purpose is pendency reduction: the normal period for the typing of an office action is approximately 15.7 days. If the examiner prepares his or her own actions, this period could be reduced to four days.

The benefits from implementation are multiple. First and foremost is the enhancement to quality. From a budget perspective, cost savings related to the elimination of unnecessary clerical typing capabilities are realized. In 1991, these savings total 33 FTE and $ 685,000 (see Examination-Clerical Initatives below). These savings grow to 132 FTE and $3,237,793 by 1995. The system cost is amortized over a five year period through savings realized by eliminating 132 clerical positions and cumulative salary savings of $10,767,000.

This request provides 400 personal computers, including off-the-shelf hardware and software, maintenance, and training. When completed, Project 4000 will extend to 2,600 units.

Patent Process Automation ($13,659,000)

The PTO requests an increase of $13,970,000 for the Automated Patent System (APS) to provide a level of funding consistent with the Automation Master Plan which is currently being revised. This increase for APS reflects changes recommended by the Industry Review Panel (IRP) and its successor, the Industry Review Advisory Committee (IRAC) . The APS costs and benefits are currently being reviewed and a revised plan will incorporate changes for the budget years beyond FY 1991. Additional detail on APS schedules and total funding can be found in the Automation Summary in the back of the Executive Direction and Administration budget activity. The table below shows how automation funds in this line item will be allocated to the systems being developed or operated by the Office of Information Systems.

The PTO also requests a decrease of $311,000 to reflect the decreased share of Management and Administrative Systems by this line item.

(Dollars in thousands)

Patent Process Automation	1991 Base	1991 Estimate	Increase/ (Decrease)
Automated Patent System	$11,984	$25,954	$13,970
Management and Administrative Systems	311	0	(311)
Total	12,295	25,954	13,659

The position and object class detail for this line item increase are shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Patent Process
Subactivity: Examination-Professional
Program Change: Maintain 18-month Patent Pendency

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	6,342
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	4,449
	Total Personnel Compensation	10,791
12.0	Personnel Benefits	1,676
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	412
24.0	Printing and Reproduction	133
25.0	Other Services	15,980
26.0	Supplies and Materials	464
31.0	Equipment	1,516
	Total Program Change	30,972

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Patent Process
Subactivity: Examination-Professional
Program Change: Maintain 18-month Patent Pendency

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Senior Executive Service	SES-4	3	78,200	234,600
Patent Examiner	GS-15	5	59,216	296,078
Patent Examiner	GS-14	(5)	50,342	(251,710)
Patent Examiner	GS-13	(106)	42,601	(4,515,744)
Patent Examiner	GS-12	91	35,825	3,260,064
Patent Examiner	GS-11	54	29,891	1,614,096
Patent Examiner	GS-09	105	27,452	2,882,452
Patent Examiner	GS-07	146	25,739	3,757,955
Patent Examiner	GS-05	28	20,780	581,842
Total Salaries		321		7,859,635
Less: Lapse		52		1,517,635
Total Full-Time Permanent		269		6,342,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	269
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	269
Authorized Positions:	
Full-Time Permanent	321
Other Than Full-Time Permanent	0
Total Authorized Positions	321

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination - Clerical	Pos./BA	756	$24,265	1,020	$33,201	264	$8,936
	FTE	756		986		230	

Examination - Clerical

This increase (264 permanent positions, 230 FTE, and $8,936,000) consists of patent examination support and patent preexamination.

	Permanent	FTE	Amount
Patent Examination Support	145	141	$3,883
Patent Preexamination	119	89	$5,053
Total	264	230	$8,936

Patent Examination Support (145 permanent positions, 141 FTE, $3,883,000)
The program change of 145 permanent positions, 141 FTE and +$3,883,000 for patent examination support is composed of three parts: An increase of 113 permanent positions, 117 FTE and $2,953,000 to maintain reduced patent pendency; an increase for SPE Clerical Support of 65 permanent positions, 49 FTE and $1,615,000; and a decrease of 33 permanent positions, 25 FTE and $685,000 for Project 4000. The increases relate to increased application filings and resultant higher workloads for both activities.

An increase of 113 permanent positions, 117 FTE and $2,953,000 is required for the clerical component supportive of the professional examining corps. The clerical examining corps maintains pending dockets of patent applications; acknowledges receipt and location of the application, and key enters relevant data onto the Patent Application Locating and Monitoring (PALM) automated systems; types, copies references and transmits to the applicant the results of initial professional examination "rejecting" or "allowing" claims in the application ("first action" notice); administratively processes the applicant reply to the first action and the examiner's notice of final rejection or allowance ("disposal"). Resources for the patent examining clerical component are tied directly to the workload received and processed by the professional examining corps. In 1990 and in 1991, we are projecting application receipts of 162,000 and 177,000, respectively. The 1990 budget assumed application receipts of 140,000. Major clerical processing workloads have also increased. Failure to provide these resources will result in backlogs of unexamined and examined cases, will increase the patent pendency period, and will prevent the maintenance of the 18 month pendency goal.

SPE Clerical Support (65 permanent positions, 49 FTE, $1,615,000):
An increase of 65 permanent positions, 49 FTE, and $1,615,000 is requested to provide administrative support to Supervisory Patent Examiners (SPEs) and the art units which they supervise.

Since 1976, the examiner's job has become more complex and additional responsibilities have been added: growth in search file subclasses and the number of patents per subclass; examination under the Patent Cooperation Treaty; use of supplemental and automated search tools; the Patent Law Amendments Act of 1984; reexamination; and numerous changes in practice and procedure. The complexity of the SPE job has also increased: beyond the above examination responsibilities, supervisory and administrative actions have grown in such areas as balancing workloads, and supervision and training of large numbers of new hires. The result of these added burdens is the potential for degradation of quality, productivity, and job satisfaction of examiners and SPEs.

By providing the art unit with clerical support assigned to the SPE, the examiners and SPEs will have more time to devote to their primary professional responsibilities. The clerical assistants will perform such administrative duties as obtaining copies of references and translations, locating and retrieving application files, monitoring application workflow using PALM, and reviewing applications for formal matters. By relieving the examiner and the SPE of these administrative functions, examination will be enhanced and non-examining time will be lessened by reducing the delegation from the SPE to the primary examiner of training time for new hires; and job satisfaction will increase. A primary benefit, however, will be the ability of the SPE to devote more time to training larger numbers of examiners. In the past, the PTO limited its hiring to the +250 range. Because of this initiative (and others identified elsewhere), the PTO proposes to hire 375 examiners in 1991. Without this initiative, the hiring of large numbers of new hires will not be possible.

Project 4000 (-$685,000):
A reduction of 33 positions, 25 FTE, and $685,000 is requested for the Corps Clerical component due to the implementation of Project 4000. As stated above in the patent professional justification for Project 4000, the provision of personal computers throughout the Patent Examining Corps is expected, as one benefit of Project 4000, to significantly reduce the clerical typing requirements. When fully deployed, the typing burden for clerical personnel is expected to be reduced by 82.5 percent. The assumption is that the examiner will produce his or her own actions on the personal computer and reduce the current action mailing period from 15.7 to four days per action.

The 1991 reduction is the first year of clerical savings under Project 4000 which will culminate in a total annual savings of 132 FTE positions and $3.2 million by 1995. This reduction is predicated upon the availability of funds for Project 4000: if Project 4000 is not funded, there are no clerical savings.

Patent Pre-Examination:

The patent pre-examination function must be augmented by 119 positions, 89 FTE, and $5,053,000 to address the annual projected receipt levels of 190,800 (which includes designs) applications by 1991. This increase is comprised of the following components:

	Permanent	FTE	Amount
Correspondence/Mail Div Workload Increase....	27	20	1,047
National Applications Workload Increase......	39	29	1,401
International Applications Workload Increase.	38	29	1,494
Patent Microfilm Workload Increase...........	15	11	1,111
TOTAL......................................	119	89	$5,053

Correspondence and Mail Division Workload Increase (27 permanent positions, 20 FTE, $1,047,000):
The PTO requests 27 positions, 20 FTE and $1,047,000 to process the increase of 37,500 patent applications. (Base funds address 153,300 applications). This increase pertains to the initial review and serialization areas which are the pivotal processing divisions of the PTO. This increase will enable the PTO to meet its production targets and support 18 month pendency. If this increase is not obtained backlogs of unprocessed mail will develop; fee revenues will not be processed in a timely manner; and by the end of the fiscal year, sixty-two days will be added to patent pendency, which will result in the PTO's inability to maintain reduced pendency.

National Applications Workload Increase (39 permanent positions, 29 FTE, $1,401,000):
An increase of 39 positions, 29 FTE and $1,401,000 is needed for the administrative examination of applications due to increased workload. The functions performed by this Division contribute to the movement of a patent application through the pre-examination process. The Division conducts an initial examination of patent applications and drawings for compliance with law and regulations; grants or denies a filing date based on such examination and forwards to the Examining Corps those granted a filing date; acknowledges the acceptance or rejection of applications for Examination; and maintains status records on applications. Without this increase, the division will be unable to meet its twenty-seven day delivery schedule to the Patent Examining Corps which will result in substantial backlogs and processing delays. This will affect the quality and quantity of service provided to the Patent Examining Corps and the public. Base funds support 153,300 applications; not the 190,800 (which includes designs) envisioned for FY 1991.

International Applications Workload Increase (38 permanent positions, 29 FTE, $1,494,000):
An increase of 38 positions, 29 FTE and $1,494,000 is required for the International Application Review Division. A portion of this request, 3 permanent positions, $184,000 and 3 FTE is requested to establish a Director's Division for the Office of National and International Application Review. This reorganization was approved by the Department of Commerce on November 30, 1988. The Director's Office provides overall management direction and oversight for three areas: 1) policy related to the processing of U.S. patent applications; 2) creation of a permanent archival record of the application as filed and; 3) determinations of granting a filing date in accordance with the Patent Cooperation Treaty.

The international division is responsible for all activities involved in the review, clearance, and approval of international patent applications before technical examination. The office corresponds with domestic and foreign applicants on completing the administrative requirements for processing applications under the Patent Cooperation Treaty (PCT) and U.S. statutes. The division ensures that the legal rights of applicants are protected and establishes policy and procedures regarding the administrative handling of domestic and foreign applications under the PCT. The Receiving Office (RO) which processes U.S. origin international applications is expecting an increase of over 2,700 cases above the FY 1990 funded level. This equates to a 38% increase in workload. The Designated Office (DO), which processes foreign international appplications, is expecting an increase of 1,000 cases or a 15% increase in workload. The requested increase is necessary if the PTO is to meet mandatory requirements under Chapters I and II of the Patent Cooperation Treaty.

Patent Microfilm Workload Increase (15 permanent positions, 11 FTE, $1,111,000):
In order to ensure that a permanent record is maintained of each document as filed, in case of litigation, loss, or for sale as requested by the public, the PTO is requesting an increase of 15 positions, 11 FTE and $1,111,000 to microfilm the increased volume of (+37,500) patent applications. Included in this request is $480,000 for three micrographic cameras needed to replace cameras which have reached their expected life of twenty years plus. The requested increase will enable the PTO to maintain the 18 month pendency and maintain service levels by allowing the Micrographics Branch to process the increased workload in a timely manner.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Patent Process
Subactivity: Examination-Clerical
Program Change: Clerical Support for Maintaining Reduced Pendency

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	3,435
11.3	Other Than Full-Time Permanent Compensation..	155
11.5	Other Personnel Compensation................	1,013
	Total Personnel Compensation..............	4,603
12.0	Personnel Benefits..........................	920
21.0	Travel and Transportation of Persons.........	5
22.0	Transportation of Things....................	0
23.1	Rental Payments to GSA......................	0
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	540
24.0	Printing and Reproduction....................	193
25.0	Other Services...............................	863
26.0	Supplies and Materials.......................	537
31.0	Equipment....................................	1,275
	Total Program Change.........................	8,936

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Patent Process
Subactivity: Examination-Clerical
Program Change: Clerical support for Maintaining Reduced Pendency

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Legal Examiner	GS-15	3	59,216	177,648
Director ONAIR	GS-15	1	59,216	59,216
Deputy Director	GS-14	1	50,342	50,342
Supervisory Application Clerk	GS-09	7	24,705	172,935
Group Director Secretary	GS-08	2	22,367	44,734
Branch Manager	GS-07	1	20,195	20,195
Deputy Supervisory Application Clerk	GS-07	2	20,868	41,736
Administrative Examiner	GS-07	8	20,195	161,560
Secretary	GS-06	1	18,174	18,174
Supervisor	GS-06	4	18,174	72,696
PCT Clerk	GS-06	2	19,386	38,771
SPE Secretary	GS-06	65	18,174	1,181,278
Initial Review Clerks	GS-05	17	16,305	277,185
Initial Review Clerk (RNA/DNA)	GS-05	1	16,305	16,305
Contact Representative	GS-05	32	16,305	521,760
Docket Clerk	GS-05	96	17,937	1,721,952
Administrative Examiner	GS-05	25	16,305	407,625
Serializing Clerks	GS-04	3	14,573	43,719
Data Entry Clerks	GS-04	6	14,573	87,438
GS-4/4 Clerical Support (Typing)	GS-04	(33)	17,975	(593,175)
Microfilm Operators	GS-04	13	14,573	189,449
Receptionist	GS-04	4	16,517	66,068
File Clerk	GS-03	2	12,982	25,964
Mail Clerk	GS-03	1	12,982	12,982
Total Salaries		264		4,816,558
Less: Lapse		45		1,381,558
Total Full-Time Permanent		219		3,435,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	219
Other Than Full-Time Permanent	11
Total Full-Time Equivalent Employment	230
Authorized Positions:	
Full-Time Permanent	264
Other Than Full-Time Permanent	11
Total Authorized Positions	275

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Appeals and Interferences..................	Pos./BA	105	$6,589	110	$6,857	5	$268
	FTE	97		101		4	

Processing Interferences (5 permanent positions, 4 FTE, +$268,000)
An increase of five permanent positions, four FTE and $268,000 is requested for the Board of Patent Appeals and Interferences to address a growth in interference case inventories. Currently, the inter partes proceedings at the Board are handled by six Examiners-in-Chief. The constant increase in the number of pending inter partes proceedings has been caused primarily by the change in the procedure which came into effect when the interference rules were revised in 1985. The change was beneficial in that it reduced the number of "fragmented" inter partes proceedings and allowed the Board to decide all relevant issues between the rival claimants. However, the change also greatly increased the workload placed on the individual Examiners-in-Chief by: placing the responsibility for conducting the interlocutory stage of an inter partes proceeding on the Examiner-in-Chief; permitting questions of patentability to be raised; and providing that all motions be decided by the Examiners-in-Chief, rather than by the patent examiner. At the same time, the subject matter involved in each inter partes proceeding has become more complex, involving rapidly evolving technologies such as biotechnology and superconductors.

Prompt disposition of cases before the Board is important to industry and the patent legal profession. In many instances the subject matter involved in inter partes proceedings pending before the Board is at the leading edge of technology. Many business, investment, and licensing decisions are dependent upon the outcome of proceedings before the Board. In order to avoid uncertainties in the law, and insure uniformity in the examination of patents and the practice of patent laws, it is essential that issues pending before the Board be promptly decided. Failure to provide this increase will cause additional delays and increase the pendency before the PTO.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Patent Process
Subactivity: Patent Appeals and Interferences
Program Change: Processing increased number of Interferences

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	153
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
	Total Personnel Compensation	153
12.0	Personnel Benefits	40
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	6
24.0	Printing and Reproduction	2
25.0	Other Services	59
26.0	Supplies and Materials	8
31.0	Equipment	0
	Total Program Change	268

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Patent Process
Subactivity: Patent Appeals and Interferences
Program Change: Processing increased number of Interferences

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Patent Appeals Examiners (P.L. 82-593).......	AD-00	2	78,200	156,400
Legal Technician............................	GS-07	1	20,195	20,195
Legal Technician............................	GS-05	2	16,305	32,610
Total Salaries..........................		5		209,205
Less: Lapse.........................		1		56,205
Total Full-Time Permanent.................		4		153,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	4
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	4
Authorized Positions:	
Full-Time Permanent	5
Other Than Full-Time Permanent	0
Total Authorized Positions	5

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Patent Printing..............................	Pos./BA	0	$21,277	0	$25,918	0	$4,641
	FTE	0		0		0	

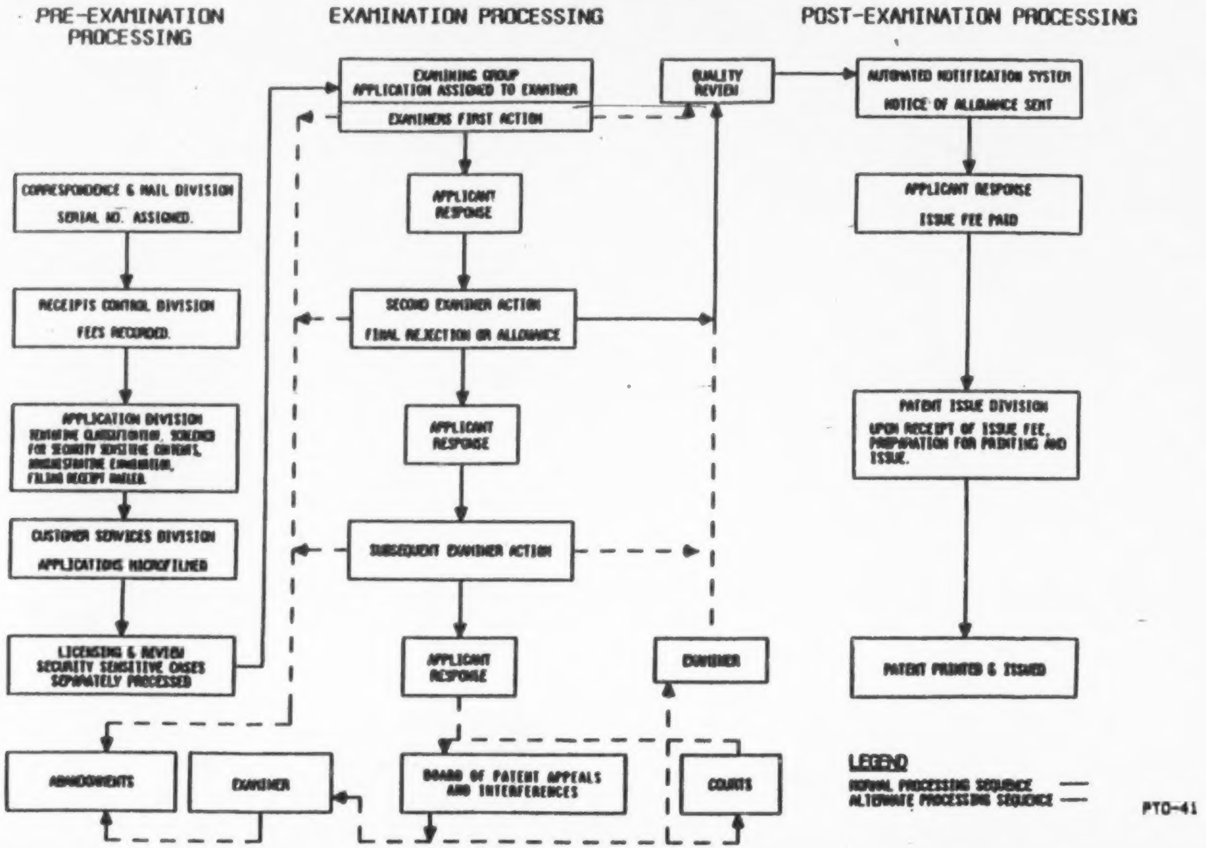
Patent Printing (+$4,641,000):
This request for an increase of $4,641,000 from the base in printing and reproduction provides sufficient funds to allow the obligation of an additional 16,600 patents, for a total of 102,000 patents obligated. The printing contract consists of two parts; the Data Base contract which will increase by $3,403,000 due to increased production volumes; and 2)the GPO printing costs which will increase by $1,238,000 due to increased printing volumes. This growth is related to increased output from the Examining Corps addressing higher filing levels and the effort to maintain patent pendency at 18 months.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Patent Process
Subactivity: Patent Printing
Program Change: Enhanced Patent Printing

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	0
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
	Total Personnel Compensation	0
12.0	Personnel Benefits	0
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	0
24.0	Printing and Reproduction	4,641
25.0	Other Services	0
26.0	Supplies and Materials	0
31.0	Equipment	0
	Total Program Change	4,641

THE PATENT PROCESS


PRE-EXAMINATION PROCESSING
EXAMINATION PROCESSING
POST-EXAMINATION PROCESSING
CORRESPONDENCE & MAIL DIVISION
SERIAL NO. ASSIGNED.
RECEIPTS CONTROL DIVISION
FEES RECORDED.
APPLICATION DIVISION
TENTATIVE CLASSIFICATION, SCREENING FOR SECURITY SENSITIVE CONTENTS, ADMINISTRATIVE EXAMINATION, FILING RECEIPT MAILED.
CUSTOMER SERVICES DIVISION
APPLICATIONS MICROFILMED
LICENSING & REVIEW
SECURITY SENSITIVE CASES SEPARATELY PROCESSED
EXAMINING GROUP
APPLICATION ASSIGNED TO EXAMINER
EXAMINERS FIRST ACTION
APPLICANT RESPONSE
SECOND EXAMINER ACTION
FINAL REJECTION OR ALLOWANCE
APPLICANT RESPONSE
SUBSEQUENT EXAMINER ACTION
APPLICANT RESPONSE
QUALITY REVIEW
EXAMINER
ABANDONMENTS
EXAMINER
BOARD OF PATENT APPEALS AND INTERFERENCES
COURTS
AUTOMATED NOTIFICATION SYSTEM
NOTICE OF ALLOWANCE SENT
APPLICANT RESPONSE
ISSUE FEE PAID
PATENT ISSUE DIVISION
UPON RECEIPT OF ISSUE FEE, PREPARATION FOR PRINTING AND ISSUE.
PATENT PRINTED & ISSUED
LEGEND
NORMAL PROCESSING SEQUENCE —
ALTERNATE PROCESSING SEQUENCE —
PTO-41

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Trademark Process

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination of trademarks..............	Pos./BA	267	$32,534	278	$13,902	279	$14,278	397	$18,908	118	$4,630
	FTE/Obl.	268	20,097	264	27,445	272		344		72	0
Trial and Appeal Board.................	Pos./BA	34	2,131	36	1,719	37	1,758	45	2,115	8	357
	FTE/Obl.	35	1,857	37	1,743	39		45		6	0
Trademark printing.....................	Pos./BA	...	1,010	...	825	...	879	...	1,005	...	126
	FTE/Obl.	...	959	...	837	...		...		...	0
Subtotal...............................	Pos./BA	301	35,675	314	16,446	316	16,915	442	22,028	126	5,113
	FTE/Obl.	303	22,913	301	30,025	311		389		78	
Revisions to 1990 FTE..................				10							
Total requirements.....................	Pos./BA	301	35,675	314	16,446	316	16,915	442	22,028	126	5,113
	FTE/Obl.	303	22,913	311	30,025	311		389		78	
Offsetting fee collections.............	BA	-	20,726	-	16,679	-	16,915	-	22,028	-	5,113
	Obl.	-	22,913	-	30,025						
Financing from prior year funds........	BA	-	14,949		...						
	Obl.		...		...						
Fees sequestered.......................	BA		...	+	233						
	Obl.		...		...						
Net request............................	BA		0		0		0		0		0
	Obl.		0		0						

Department of Commerce
Patent and Trademark Office
Salaries and Expenses

JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Obligations in Thousands)

Activity: Trademark Process

Goals and Objectives

Goals:

- To stimulate business investments and protect consumers by providing prompt registration of trademarks, improve trademark quality and to provide the public with information concerning pending and registered marks.
- To automate the patent and trademark processes.

Objectives:

To maintain the achievements of 1985 through 1991:

- the reduced trademark pendency of three months to first action for all cases and thirteen months to disposal for use based cases with timely disposal of all others.
- the reduced Trademark Trial and Appeal Board adjudication period of twelve weeks.
- the automated operation of Trademark Process functions including searching and photocomposition.

To implement the provisions of the Trademark Law Revision Act of 1988, the principal component of which is referred to as "intent-to-use".

Proposed Legislation

Public Law 100-703 authorizes the programs of the PTO through the end of FY 1991.

Base Program

Examination of Trademarks

Trademark examination includes examination of applications for the Federal registration of trademarks. Based on searches of prior registrations and pending applications, and application of Trademark law and court decisions, Trademark attorney advisors either allow or reject applications for registration. In the course of examining a trademark application, the attorney advisor will make an initial determination on the registrability of the trademark (first action) which, after a response by the applicant, will generally be followed either by (1) forwarding the trademark for publication in the **Trademark Official Gazette** for opposition, or (2) final rejection and subsequent abandonment or ex parte appeal of the attorney's decision to the Trademark Trial and Appeal Board. Trademark examination activities also cover post registration processes associated with the maintenance of the registration. This involves the examination of: (1) affidavits of continued use, (2) applications for renewal of registrations, and (3) applications for amendment of registrations.

The Trademark Law Revision Act of 1988 was implemented on November 16,1989. The Act amends the trademark law so as to allow an applicant to file an application based on a bona fide intention to use the mark in commerce. Heretofore, an applicant had to have used the mark in interstate commerce or have owned a foreign application of registration prior to filing for a U.S. registration. The processing and examination of the three types of applications, i.e., use, intent-to-use and foreign-based, is essentially the same; however, an applicant under the "intent-to-use" provision of the Act will have a period of up to three years to make use of the mark in commerce, at which time a second examination will take place.If the application clears the second examination, a registration will issue.

This line item includes funding for mail services in support of all trademark functions and for file maintenance of registered and abandoned files. This line item also includes funding for Trademark Automation. Trademark automated systems are designed to improve search effectiveness; improve file integrity; provide a full text data base of applications and registrations for use by office attorneys and other employees, and the public; and to provide support for the automated photocomposition of the **Trademark Official Gazette** and related registration documents.

Trial and Appeal Board

The Trademark Trial and Appeal Board (TTAB) decides adversary proceedings involving interference applications, oppositions to registration, concurrent use applications, and cancellation petitions. The TTAB also hears ex parte appeals resulting from final refusals of registration by Trademark attorney advisors.

Trademark Printing

After an office attorney forwards a case for publication, the mark is printed in the **Trademark Official Gazette** for opposition. If an opposition proceeding is filed within 30 days, the case goes to the TTAB for an inter partes opposition hearing. If a mark filed under the use and foreign-based provisions of the Act is not opposed, the mark is registered, a certificate of registration is printed and mailed to the applicant, copies are made for sale to the public, a notice of registration is printed in the **Trademark Official Gazette**, and a record of the registration is kept in the Patent and Trademark Office. If a mark filed under the intent-to-use provision is not opposed, a Notice of Allowance will be issued by the PTO and the applicant then has a period of six months to use the mark in commerce or request further six month extensions, up to a total of three years. After use is perfected, the mark will undergo a second examination by an attorney advisor, and, if entitled to registration, a notice of registration will be printed in the Offical Gazette and a record of the registration will be maintained in the office.

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Pre-examination:				
Mail documents processed	1,602,363	1,553,931	1,776,000	1,868,352
File orders filled	177,161	113,386	253,921	269,893
Trademark Applications:				
Applications in Office (start of year) 1/	77,538	90,079	99,337	112,780
Applications received 1/	76,813	83,169	100,500 2/	106,500 2/
Application disposals by examiners 1/	(75,303)	(80,275)	(94,812)	(100,500)
Change in printing inventory 1/	11,031	6,364	7,755	11,780
Applications in Office (end of year) 1/	90,079	99,337	112,780	130,560
First actions 1/	79,425	79,382	96,500	102,200
Certificates of registration printed	46,704	51,802	64,000	67,600
Pendency to first action - all cases (in mos)	2.5	2.8	3.0	3.0
Pendency to registration/abandonment-use cases (in months)	13.3	13.8	13.0	13.0
Contested cases - Trial and Appeal Board:				
Received during the year	3,694	3,637	3,800	4,892
Disposed of during the year	(3,603)	(3,642)	(3,900)	(4,134)
Pending (end of year)	5,597	5,592	5,492	6,250

1/ Applications covering two or more classes of goods or services are counted as two or more applications.

2/ With the implementation of Intent-to-Use legislation in November 1989, 1990 filings are estimated to increase by 25 percent over the original 1990 estimate of 80,400. 1991 filings are estimated to increase by six percent above the revised 1990 estimate.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Examination of Trademarks....................	Pos./BA	279	$14,278	397	$18,908	118	$4,630
	FTE	272		344		72	

This increase is composed of two initiatives: an initiative for Examination of Trademark and an initiative for Trademark Process Automation.

Examination of Trademarks (118 permanent positions, 72 FTE, $3,149,000)

The PTO requests an increase of 118 permanent positions, 72 FTE and $3,149,000 for Examination of Trademarks.

	Permanent Positions	FTE	Amount
Trademark Examination.........................	103	61	$2,629
Trademark Post Registration..................	11	8	243
Trademark Pre-Examination....................	4	3	277
Total.......................................	118	72	$3,149

Trademark Examination (103 permanent positions, 61 FTE, $2,629,000)
An increase of 103 positions, 61 FTE and $2,629,000 is requested to address the increased workload in Trademark examination. The Trademark Law Revision Act of 1988 was implemented on November 16, 1989. The Act now permits the filing of a trademark application based on an applicant's bona fide intention to use the mark in commerce, and retains the other two bases for filing an application - actual use in commerce or ownership of a foreign application or registration. Because of the new intent-to-use provision in the Act, it is anticipated that application filings will increase 25 percent over the original 1990 budget estimate and by 6 percent annually in subsequent years. Examining and support staff must be increased commensurate with the increased filings to maintain pendency of three months to first action for all cases and 13 months to disposal for use cases with timely disposal of all other applications. If increased staffing is not provided, quality of examination and service to the public will deteriorate and the ability of parties to make informed marketing decisions regarding use of their marks in the marketplace will be impaired.

With the anticipated volume of applications and workload, this increase provides for two additional Law Offices to be established in 1991. This increase is essential to ensure effective management of training and workloads in the Examining Operation.

A 1988 initiative was approved for key entry of Trademark data from new applications into the TRAM/T-SEARCH systems. An increase is needed to maintain the viability of the application data base on a timely basis and, hence, to continue to maintain pendency for use-based applications. This increase allows the contract to expand as applications increase.

Trademark Post Registration (11 permanent positions, 8 FTE, $243,000)
An increase of 11 positions, 8 FTE and $243,000 is necessary to process the increased filings of post registration papers within the Trademark Service Division. Section 8 and 15 affidavits are increasing significantly because of the record high levels of registrations issued six years ago. (Section 8 affidavits must be filed between the fifth and sixth year after registration). It is anticipated that the demand for certified copies will increase significantly as a result of the increased application filing activities under the Trademark Law Revision Act of 1988. The requested increases are required to handle increased workloads.

Trademark Pre-Examination (4 permanent positions, 3 FTE, $277,000)
An increase of four positions, three FTE and $277,000 is necessary for mailroom functions. The additional resources are required to meet the increased demands resulting from higher filings under the Trademark Law Revision Act of 1988. The additional staff will be hired for the second shift operation which was implemented in FY88. In addition, as the number of filings and disposals continue to increase, the demand for the retrieval of trademark files by both the Trademark examining operation and members of the public will increase. This increase is essential to maintain trademark pendency and the high standards for mail processing and file retrieval.

Trademark Process Automation

The PTO requests an increase of $1,481,000 for automation initiatives. Of this amount, $992,000 is requested to continue leasing and maintaining the automated Trademark Search System (T-Search). Examining attorneys are using both the word and design capabilities of T-Search to conduct all trademark searches during examination and the system is deployed in the Trademark Public Search Library. Modernization of the T-Search terminal components (hardware and software) to improve system performance will require an increase of $339,000. The current hardware configuration of B-22 terminals was designed in 1981 and the terminals are no longer manufactured or sold. The remainder of this increase, $150,000, is requested to support system performance enhancements that are available from the contractor. Each year a number of requests for modifications to the T-Search System are generated by the examiners and other users. It is essential that the performance of the T-Search System be improved to allow the maintenance of the reduced trademark pendencies and quality examination in the Trademark operation. We anticipate a requirement to upgrade T-Search to expand the systems capacity to handle additional users and the increased filings expected under intent-to-use. On May 31, 1989 trademark text databases were released for purchase by the public. PTO anticipates a demand for the image database. A modification to the T-Search System will allow digitized image data to be written to magnetic tape in a standard format so that the images can be sold to the public.

All trademark initiatives are fully financed by Trademark user fees.

(Dollars in thousands)

Trademark Process Automation	1991 Base	1991 Estimate	Increase/ (Decrease)
Trademark Automation	$1,849	$3,330	$1,481

The position and object class detail for this line item increase are shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Trademark Process
Subactivity: Examination of Trademarks
Program Change: Maintain reduced Trademark Pendency

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	1,779
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation.................	30
	Total Personnel Compensation..............	1,809
12.0	Personnel Benefits............................	470
21.0	Travel and Transportation of Persons.........	0
22.0	Transportation of Things......................	0
23.1	Rental Payments to GSA........................	0
23.2	Rental Payments to Others.....................	0
23.3	Communications, Utilities, and Other Rent....	335
24.0	Printing and Reproduction.....................	76
25.0	Other Services................................	1,445
26.0	Supplies and Materials........................	182
31.0	Equipment.....................................	313
	Total Program Change.........................	4,630

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Trademark Process
Subactivity: Examination of Trademarks
Program Change: Maintain reduced Trademark Pendency

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Attorney Advisor	GS-15	3	59,216	177,648
Attorney Advisor	GS-14	9	50,342	453,078
Program Analyst	GS-14	1	50,342	50,342
System Manager Computer Specialist	GS-13	1	42,601	42,601
Program Analyst	GS-12	1	35,825	35,825
Attorney Advisor	GS-11	39	29,891	1,165,749
Paralegal Supervisor	GS-11	1	29,891	29,891
Affidavit & Renewal Examiner	GS-09	1	24,705	24,705
Program Analyst	GS-09	1	24,705	24,705
Paralegal	GS-09	9	24,705	222,345
Clerical Supervisor	GS-08	1	22,367	22,367
Clerical Supervisor	GS-07	1	20,195	20,195
Secretary	GS-07	1	20,868	20,868
Applicaton Examiner	GS-07	2	20,868	41,736
Data Quality Control Technician	GS-07	3	20,195	60,585
Secretary	GS-06	1	19,386	19,386
Supervisory Initial Review Clerk	GS-06	1	18,174	18,174
Initial Review Clerks	GS-05	3	16,305	48,915
Applicaton Clerk (Certification)	GS-05	3	17,937	53,811
Applications Clerk	GS-05	9	16,305	146,745
Clerk (Typing)	GS-05	2	16,517	33,034
Docket Clerk	GS-04	14	14,573	204,022
Design Coder	GS-04	2	14,573	29,146
Messenger	GS-04	1	14,573	14,573
Typist	GS-04	5	16,517	82,585
File Clerk	GS-03	3	12,982	38,946
Total Salaries		118		3,081,977
Less: Lapse		46		1,302,977
Total Full-Time Permanent		72		1,779,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	72
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	72
Authorized Positions:	
Full-Time Permanent	118
Other Than Full-Time Permanent	0
Total Authorized Positions	118

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Trial and Appeal Board	Pos./BA	37	$1,758	45	$2,115	8	$357
	FTE	39		45		6	

Trademark Appeals (8 permanent positions, 6 FTE, $357,000)
An increase of eight positions, six FTE and $357,000 is required due to Trademark application filing increases of 25 percent in 1990 and another six percent annually in subsequent years due to the implementation of the Trademark Law Revision Act of 1988. As the additional applications are examined in the Trademark Examining Operation and mature into FINALS or publications for opposition, ex parte appeals and inter partes (oppositions and cancellations) filings will increase by a commensurate level at the Trademark Trial and Appeal Board. This increase will be necessary to address these workload increases.

This initiative is fully financed by Trademark user fees.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Trademark Process
Subactivity: Trademark Trial and Appeal Board
Program Change: Trial and Appeal Board Support

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	236
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	0
	Total Personnel Compensation	236
12.0	Personnel Benefits	62
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	10
24.0	Printing and Reproduction	3
25.0	Other Services	34
26.0	Supplies and Materials	12
31.0	Equipment	0
	Total Program Change	357

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Trademark Process
Subactivity: Trademark Trial and Appeal Board
Program Change: Trial and Appeal Board Support

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Trademark Appeals Examiners (P.L. 98-622)	AD-16	2	69,451	138,902
Interlocutory Attorney	GS-15	2	59,216	118,432
Application Examiner	GS-06	1	19,386	19,386
Docket Clerk	GS-05	1	16,305	16,305
Clerk Typists	GS-04	2	16,517	33,034
Total Salaries		8		326,059
Less: Lapse		2		90,059
Total Full-Time Permanent		6		236,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	6
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	6
Authorized Positions:	
Full-Time Permanent	8
Other Than Full-Time Permanent	0
Total Authorized Positions	8

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Trademark Printing............................	Pos./BA	0	$879	0	$1,005	0	$126
	FTE	0		0		0	

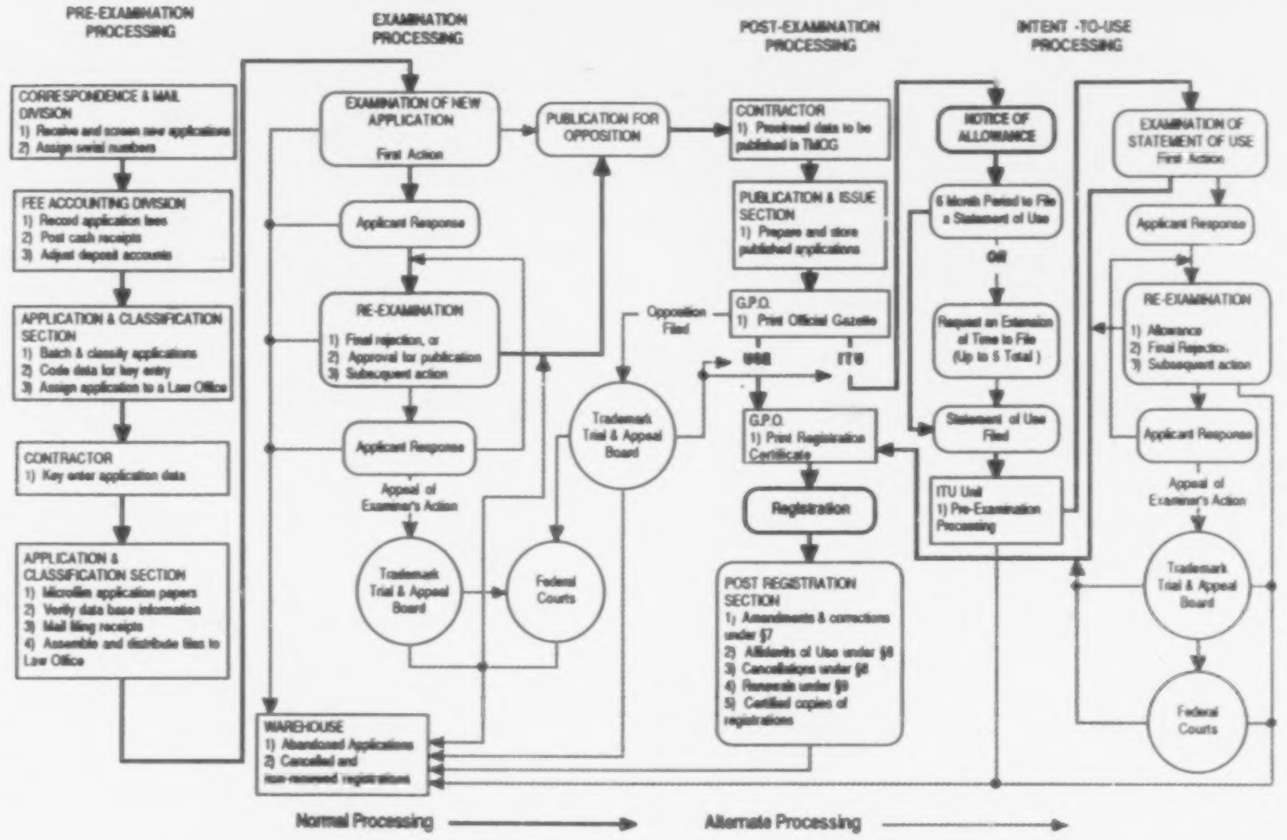
This increase is necessary to address higher costs associated with printing greater numbers of registered trademarks. The implementation of the Trademark Law Revision Act of 1988 is also expected to significantly increase the number of trademarks published for opposition. The increase of $126,000 is all in object class 24 for printing and reproduction.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Trademark Process
Subactivity: Trademark Printing
Program Change: Enhanced Trademark Printing

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	0
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation................	0
	Total Personnel Compensation..............	0
12.0	Personnel Benefits..........................	0
21.0	Travel and Transportation of Persons.........	0
22.0	Transportation of Things.....................	0
23.1	Rental Payments to GSA.......................	0
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	0
24.0	Printing and Reproduction....................	0
25.0	Other Services...............................	126
26.0	Supplies and Materials.......................	0
31.0	Equipment....................................	0
	Total Program Change.........................	126

TRADEMARK PROCESSING


PRE-EXAMINATION PROCESSING
CORRESPONDENCE & MAIL DIVISION 1) Receive and screen new applications 2) Assign serial numbers
FEE ACCOUNTING DIVISION 1) Record application fees 2) Post cash receipts 3) Adjust deposit accounts
APPLICATION & CLASSIFICATION SECTION 1) Batch & classify applications 2) Code data for key entry 3) Assign application to a Law Office
CONTRACTOR 1) Key enter application data
APPLICATION & CLASSIFICATION SECTION 1) Microfilm application papers 2) Verify data base information 3) Mail filing receipts 4) Assemble and distribute files to Law Office
EXAMINATION PROCESSING
EXAMINATION OF NEW APPLICATION First Action
Applicant Response
RE-EXAMINATION 1) Final rejection, or 2) Approval for publication 3) Subsequent action
Applicant Response
Appeal of Examiner's Action
Trademark Trial & Appeal Board
Federal Courts
WAREHOUSE 1) Abandoned Applications 2) Cancelled and non-renewed registrations
PUBLICATION FOR OPPOSITION
Opposition Filed
Trademark Trial & Appeal Board
POST-EXAMINATION PROCESSING
CONTRACTOR 1) Proofread data to be published in TMOG
PUBLICATION & ISSUE SECTION 1) Prepare and store published applications
G.P.O. 1) Print Official Gazette
USE
ITU
G.P.O. 1) Print Registration Certificate
Registration
POST REGISTRATION SECTION 1) Amendments & corrections under §7 2) Affidavits of Use under §8 3) Cancellations under §8 4) Renewals under §9 5) Certified copies of registrations
INTENT -TO-USE PROCESSING
NOTICE OF ALLOWANCE
6 Month Period to File a Statement of Use
OR
Request an Extension of Time to File (Up to 5 Total)
Statement of Use Filed
ITU Unit 1) Pre-Examination Processing
EXAMINATION OF STATEMENT OF USE First Action
Applicant Response
RE-EXAMINATION 1) Allowance 2) Final Rejection 3) Subsequent action
Applicant Response
Appeal of Examiner's Action
Trademark Trial & Appeal Board
Federal Courts
Normal Processing
Alternate Processing

PTO-56

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Information Dissemination

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Customer services	Pos./BA	122	$15,519	99	$8,470	105	$8,647	155	$10,561	50	$1,916
	FTE/Obl.	121	14,038	106	8,738	112		154		42	
Publication services	Pos./BA	93	4,687	121	4,031	124	4,216	144	4,901	20	685
	FTE/Obl.	100	4,411	112	4,161	116		131		15	
Data and document retrieval systems	Pos./BA	279	34,608	295	31,199	295	32,160	320	34,303	25	2,143
	FTE/Obl.	304	34,029	288	32,486	297		317		20	
Subtotal	Pos./BA	494	54,814	515	43,700	524	45,023	619	49,765	95	4,742
	FTE/Obl.	525	52,478	506	45,385	525		602		77	
Revisions to 1990 FTE				18							
Total requirements	Pos./BA	494	54,814	515	43,700	524	45,023	619	49,765	95	4,742
	FTE/Obl.	525	52,478	524	45,385	525		602		77	
Offsetting fee collections	BA	-	31,619	-	24,169	-	25,229	-	29,971	-	4,742
	Obl.	-	32,344	-	24,169						
Financing from prior year funds	BA	-	3,210		...						
	Obl.		...		...						
Fees sequestered	BA		...	*	338						
	Obl.		...		...						
Net request	BA		19,985		19,869		19,794		19,794		0
	Obl.		20,134		21,216						

Department of Commerce
Patent and Trademark Office
Salaries and Expenses

JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Obligations in Thousands)

Activity: Information Dissemination

Goals and Objectives

Goals:

- Automate the Patent and Trademark processes.
- Disseminate information relating to new technology and trademarks through the sale of copies of issued patents and registered trademarks.
- Stimulate innovation through prompt dissemination of patent information.
- Organize technological and trademark information in a manner which will be readily accessible to both examiners and the public.

Objectives:

- Facilitate effective dissemination of patent and trademark information to the user community through automation of the patent and trademark information retrieval systems.
- Efficiently process allowed patent applications.
- Properly maintain patent and trademark search room facilities, instruct the public in their use, and fill requests for copies of official documents.
- Maintain a current and accessible subject matter classification system for use in locating prior art and new technology; ensure the integrity of related search files and data records; and facilitate retrieval through automated patent search systems.
- Further disseminate patent and trademark information through the Patent Depository Library systems and technology assessment and forecast programs.

Proposed Legislation

Public Law 100-703 authorizes the programs of the Patent and Trademark Office through fiscal year 1991.

Base Program

Customer Services

The Customer Services activity includes reproduction services, assignment functions, and file integrity maintenance of the patent and trademark search rooms. This includes the production and sale of certified and uncertified copies of office records and printed copies of patents and trademark registrations. Legal instruments that affect or transfer property rights in patent and trademark cases are received, examined, and ministerially recorded. Assignment information on Patents and Trademark applications and registrations is made available for public use in the Assignment Search Room. PTO maintains a patent search room and a trademark search room containing over 15 million U.S. patents and over 3.3 million trademark files primarily for public use. The public can also access the Automated Patent System and the Trademark T-Search automated systems in the public search rooms.

Publication Services

Publication Services manage, monitor, and execute the various stages through which allowed applications progress before they are issued as patent grants. Program activities include preparing, scheduling, and transmitting allowed applications for printing; developing and administering document quality standards; certifying and distributing patent grants; and disclosing information to the public, principally through the two weekly editions of the Official Gazette (one patent edition and one trademark edition). The PTO maintains a Patent Maintenance Fee Division for notification and termination actions and collection of maintenance fees.

Data and Document Retrieval Systems

The programs of this line item maintain and update a subject matter classification system for U.S. and foreign patents and related technical literature that is vital to the patent application examination process. The examiner search files, containing more than 15.6 million U.S. patents, 13 million foreign patent documents, and about 1.4 million technical literature documents, are continually expanding. About 300,000 U.S. patents and cross-references and over 400,000 distinct foreign patents are added annually. A concentrated effort is being made to reclassify the files by expanding the classifications for new technologies and subdividing the expanding search files of patents and technical literature into technologically up-to-date and smaller, more efficiently searched classification groups. This is necessary to cope with the increasing complexity of technology and the growing size of the search file. Other resources are for foreign patent processing, maintenance of a Scientific Library, the Technology Assessment and Forecast program and the Patent Depository Library System. This line item also includes funding for patent automation activities.

Summary of Workload and Performance Data
(In Thousands)

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Customer Services				
Certified copies (applications & file wrappers)	92	93	95	103
Total Certified and uncertified copies	...	...	136	151
Patent and trademark copies..................	2,208 *	2,268 *	2,700 *	2,799
New patents filed............................	310 *	313 *	265 *	265
Reclassified patents filed...................	239 *	252 *	350 *	418
Assignment properties processed..............	...	200	259	276
Assignment title reports / Abstracts of title	37	53	38	38
New trademark registrations filed............	130	134 *	175 *	229
New trademark drawings filed.................	185	178 *	147 *	291
Updating trademark bound volumes.............	43	49 *	25 *	25
Publications Services				
Patent maintenance fees processed............	68	71	99	117
Certificates of correction processed.........	13	13	12	13
Data and Document Retrieval Systems				
Orig. references professionally reclassified.	102	111	114	119
Original references clerically processed.....	93 *	107 *	103 *	113
New foreign patents processed into the files.	323	326	433	433
Patent Depository Libraries..................	62	65	70	75

*To be partially or completely accomplished by contractor personnel.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Customer Services	Pos./BA	105	$8,647	155	$10,561	50	$1,914
	FTE	112		154		42	

The increase for this line item is composed of two initiatives. The first is for increased services workload and the second is for public search room services.

Increased Services Workload: (34 permanent positions, 26 FTE, $1,721,000)
The PTO requests 34 positions, 26 FTE and $1,721,000 to process public requests for services entirely funded by fees. The request is composed of the following components:

	Permanent Positions	FTE	AMOUNT
Public Service Center	4	3	194,000
Assignment Workload Increase	26	20	1,114,000
Certification Workload Increase	4	3	103,000
Copy Sales Workload Increase	0	0	310,000
TOTAL	34	26	$1,721,000

Public Service Center: (4 permanent positions, 3 FTE, $194,000)
An increase of four positions, three FTE and $194,000, which is totally fee supported, is needed to handle a 20% increase in workload. The enhancement will enable the Public Service Center to meet its goals of timely responses to requests from the public for information on PTO products and services and problem resolutions. The Center is designed as the focal point for all questions and inquiries on the PTO and, due to its success and increasing intellectual property activity the Center is experiencing a significant increase in the volumes of public contacts with the Office. If enhancements are not received then the Center will not be able to meet its goals and an increasing number of public and in-house complaints will be received.

Assignment Workload Increase: (26 permanent positions, 20 FTE, $1,114,000)
Increased filings have increased the workload for processing assignments. The assignment function records the transfer of ownership rights of a patent or trademark. Base resources have been provided for processing 127,000 patent and trademark assignments. The PTO estimates 276,225 patent and trademark assignments to be recorded in FY 1991. This equates to an increase of over 30%. Twenty-six positions, twenty FTE and $1,114,000 is needed to process this increase.

Certification Workload Increase: (4 permanent positions, 3 FTE, $103,000)
The Certification division expects a 30% increase in requests from the public for certified copies of patent application files, office records trademark files, and registrations due to the increase in workload for FY 1991.

Four positions, three FTE and $103,000, which is totally fee funded, is requested in order to prevent delays in the certification service and deterioration of products. If the PTO fails to process user requests for certified copies on a timely basis the result is the loss of filing dates of U.S. applicants in foreign countries, as well as loss of revenues to the PTO.

Copy Sales Workload Increase: ($310,000)
An increase of $310,000 for copy sales and public photocopier contracts cost increases is requested to keep pace with the volumes of patents issued. The funds requested will allow this mostly contractually operated function to expand consistently with the growth in copy requests an still maintain all standards for product quality and timeliness. This initiative aligns program income and secures a permanent funding base for the expanded program. This increase is supported totally by user fees.

Public Search Room Services: (16 permanent, 16 FTE, $193,000)
The PTO requests an increase of 16 permanent positions, 16 FTE and $193,000 to establish a permanent funding base for the Patent and Trademark Automated Search Rooms. Federal rules have recently been published in the Federal Register to establish fees for public use of the PTO's automated search systems (APS-Text and T-Search). The purpose of this initiative is to secure a permanent funding base in the budget for thes two totally fee supported functions. The resources requested are consistent with the costs reviewed and approved by the Administration during the review of the Federal Register notice in early 1989. The actual amount of this request is $1,141,000 which will be reduced by $961,000 This amount was initally approved in the FY 1986 Congressional Request for the Automated Trademark Public Search Room. When this request was submitted the PTO assumed cost estimates which were structurally different from the current needs. Therefore, we are reducing our request by that amount.

The PTO is a service oriented institution which has established goals for providing the public with records of property rights. Without this increase, services to the public will be unable to market intellectual property and the public will not have current ownership information which will adversely affect U.S. Commerce.

The personnel and object class detail for this increase is shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Information Dissemination
Subactivity: Customer Services
Program Change: Increased Services Workload and Public Search Room Services

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	1,081
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	260
	Total Personnel Compensation	1,341
12.0	Personnel Benefits	286
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	65
24.0	Printing and Reproduction	27
25.0	Other Services	78
26.0	Supplies and Materials	106
31.0	Equipment	11
	Total Program Change	1,914

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Information Dissemination
Subactivity: Customer Services
Program Change: Increased Services Workload and Public Search Room Services

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Branch Chief	GS-13	3	42,601	127,803
Technical Information Specialist	GS-12	11	35,825	394,075
Supervisory Paralegal Specialists	GS-11	2	29,891	59,782
Technical Information Specialist	GS-11	2	29,891	59,782
Supervisory Legal Clerk	GS-10	1	27,206	27,206
Paralegal Specialists	GS-09	5	24,705	123,525
Public Information Specialist	GS-09	2	24,705	49,410
Supervisory Clerk	GS-09	(1)	24,705	(24,705)
Supervisor	GS-09	1	24,705	24,705
Supervisory Legal Clerk	GS-09	1	24,705	24,705
Supervisory Data Entry Clerk	GS-07	1	20,195	20,195
Search Advisor	GS-07	(2)	20,195	(40,390)
Conveyance Examiner	GS-07	8	20,195	161,560
Technical Information Assistant	GS-07	9	20,195	181,755
Records and Status Control Specialists	GS-07	2	20,195	40,390
File Clerk	GS-05	(2)	16,305	(32,610)
Data Technician	GS-05	(4)	16,305	(65,220)
Data Entry Clerk	GS-05	6	17,937	107,622
Application Clerk	GS-05	4	16,305	65,220
Public Contract Assistant	GS-05	2	16,305	32,610
Clerk Typist	GS-03	(1)	12,982	(12,982)
Total Salaries		50		1,324,438
Less: Lapse		8		243,438
Total Full-Time Permanent		42		1,081,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	42
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	42
Authorized Positions:	
Full-Time Permanent	50
Other Than Full-Time Permanent	8
Total Authorized Positions	50

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Publication Services..........................	Pos./BA	124	$4,216	144	$4,901	20	$685
	FTE	116		131		15	

Patent Post Examination (20 permanent positions, 15 FTE, $685,000):
The PTO requests an increase of 20 positions, 15 FTE and $685,000 to process a 20% increase in the volume of maintenance fees and certificates of corrections. Of this amount, 12 FTE and $599,000 is required to process 101,000 printed patents, an increase of 15,900 prints above the 1990 estimates. These additional funds are requested to schedule and manage the processing of allowed patent application files and associated drawings for creating a full patent text machine language data base and the composition and printing of weekly patent issues and related announcements in the *Official Gazette*. The timely publication of patent issues is necessary to maintain the reduced patent pendency. The patent text data base is also required for the APS automated text search system used by all examiners. An increase of four positions, three FTE and $86,000 is requested for the Patent Maintenance Fee Division. The workload to process the maintenance fee has risen quickly as patent issues from the Examination Corps have increased to address the patent pendency reduction plan in an environment of accelerating receipts. Sufficient resources are not available within base to process the projected volume of 117,000 maintenance fees and terminations in the Patent Maintenance Fee Division. As a result, backlogs in collection and notification of maintenance fees will increase. If backlogs are permitted to grow, the public will not be made aware of which patents have been extended and which have been terminated. The PTO will not have fulfilled the requirements of Public Laws 96-517 and 97-247 which deal with the due-date notification and collection of patent maintenance fees. The PTO will also suffer an income shortfall.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Information Dissemination
Subactivity: Publication Services
Program Change: Increased Workload for Patent Post-Examination

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	262
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	56
	Total Personnel Compensation	318
12.0	Personnel Benefits	69
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	28
24.0	Printing and Reproduction	8
25.0	Other Services	219
26.0	Supplies and Materials	30
31.0	Equipment	13
	Total Program Change	685

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Information Dissemination
Subactivity: Publication Services
Program Change: Increased Workload for Patent Post-Examination

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Contract Specialist	GS-13	1	42,601	42,601
Quality Assurance Specialist	GS-09	1	24,705	24,705
Engineering Draftsman	GS-07	1	20,195	20,195
Patent Assistant	GS-06	1	18,174	18,174
Patent Clerk Correspondence	GS-06	2	18,174	36,348
Editorial Clerk	GS-06	1	18,174	18,174
Patent Maintenance Assistant	GS-05	4	16,305	65,220
Patent Clerk	GS-05	2	16,305	32,610
Production Control Clerk	GS-04	1	14,573	14,573
Patent Copy Inspection Clerk	GS-04	3	14,573	43,719
Data Base Inspection Clerk	GS-04	2	14,573	29,146
Clerk Typist	GS-04	1	16,517	16,517
Total Salaries		20		361,982
Less: Lapse		5		99,982
Total Full-Time Permanent		15		262,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	15
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	15
Authorized Positions:	
Full-Time Permanent	20
Other Than Full-Time Permanent	0
Total Authorized Positions	20

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Data and Document Retrieval Systems.........	Pos./BA	295	$32,160	320	$34,303	25	$2,143
	FTE	297		317		20	

This initiative consists of three parts: 1) patent search file integrity (10 permanent positions, 8 FTE, $243,000); 2) examiner search services (15 permanent positions, 12 FTE and $2,586,000); and 3) information dissemination automation (-$686,000).

Patent Search File Integrity (10 permanent positions, 8 FTE, $243,000)
This increase consists of three parts: 1) New Issue Processing (6 permanent positions, 5 FTE, $145,000); and 2) Clerical Original References (4 permanent positions, 3 FTE, $95,000); and 3) Japanese Abstracts ($3,000).

An increase of six positions, five FTE and $145,000 is requested to process the increased volume of new U.S. patents. The annual volume of newly issued U.S. patent copies to be processed, labeled, and forwarded to the examiner search file and the public search file has grown from 572,295 in FY 1985 to 636,888 in FY 1988. Current estimates anticipate a volume of 836,000 documents to be processed in FY 1991. With the additional work, a variety of recurring problems with the printing contractor, and the need to improve the quality of the work produced have created an extremely difficult situation. These resources will provide timely support to the examiners and other PTO employees who rely on the search files. If this staffing level is not increased, a decrease in the quality of the search file can be anticipated.

The second part is a request for four positions, three FTE, and $95,000 to clerically process an increase of 10,000 Original References (ORs) to 113,000 ORs for 1991. This increase is needed to keep pace with the professional OR goal. If documents are professionally reclassified they should be clerically processed and returned to the search files as quickly as possible. Completed professional reclassification projects are of no value physically awaiting clerical processing efforts. Increased support in preparing associated search tools in a timely and accurate fashion is also required. It is imperative that the search files be restructured through the reclassification process to support comprehensive, quality searches by the examiners.

The third part addresses increased requirements for the 1990 initiative dealing with the classification of Japanese Abstracts. This request addresses an increase in Japanese patent documents in 1991 beyond the scope of the 1990 initative. The Japanese Patent Information Organization (JAPIO) is increasing the scope of their English Language Abstracting Service from 70 percent to 100 percent of the unique, published Japanese patent applications. The Japanese documents must be classified according to U.S. standards. The Patent Cooperation Treaty requires the PTO to place in our search file unique Japanese patent documents having an English language abstract. More importantly, the goal of issuing high quality U.S. patents requires examiner access to complete search files, files that must include patents examined by the world's largest patent office----the Japanese Patent Office.

Examiner Search Services (15 permanent positions, 12 FTE and $2,586,000)
This initiative consists of three parts: 1) Genetic Sequencing Search (Biotechnology) (6 permanent positions, 5 FTE and $1,734,000); 2) On-line Commercial Data Base Searching ($257,000); and 3) Examiner Training for the International Patent Classification (IPC) System (9 permanent positions, 9 permanent positions, 7 FTE and $595,000).

The first part of this increase for six positions, five FTE and $1,734,000 is requested in support of the biotechnology patent applications. The world-wide activity in the field of biotechnology is signified by projections for the doubling of known sequences every one to two years. Paralleling this growth are projections that biotechnology patent applications with sequences will continue to grow in number. With a growing backlog of these applications, industry, and the Congress and the PTO became extremely concerned about the speed and quality of examination of biotechnology patent applications. This urgent situation led to several top priority steps beings taken, including establishment of a new biotechnology patent examining group, and the acquisition of a basic computerized system for searching sequences. Resources are needed in several areas in order to develop effective search tools that will aid examiners in producing good quality, timely patents. These resources will provide for automatic input, early search access, provide for future public access and dissemination of patent sequence data bases and facilitiate efficient and accurate printing of issued patents.

The second part of this increase for $257,000 which is requested to expand examiner commercial data base searching. Thorough and timely patent examinations require that patent and nonpatent literature in commercial data bases be searched in addition to the prior art contained in examiner search files. Over recent years, examiners have come to rely heavily on searching a broad range of technical fields in this way. In some subject fields, online searching is the only practical method for searching the pertinent prior art. Patent pendency and patent quality are both impacted in a positive way by online searching of commercial data bases. Availability of the needed funds will permit continued use of this important search method without interruption, and to the extent needed by patent examiners. This situation will contribute to pendency maintenance and an increase in the quality of patents. A funding shortage of the current magnitude will require a cut in service by one-third and imposition of strict rationing. Negative impacts will include a reduction in patent quality, increased pendency, and lowering of examiner morale.

The third part of this increase for nine positions, seven FTE, and $595,000 is requested for more effective examiner training in the use of the International Patent Classification (IPC) System. The IPC is the principal tool to be used by the patent examiners in search of foreign patents in APS. Studies and feedback from foreign patent offices have revealed a serious deficiency with our patent examiners. As evidenced by their assignment of IPC classification to issuing U.S. patents, the accuracy of placement of these documents is insufficient to insure adequate search coverage. Further, in an increasing number of technology areas, the IPC is being used as the only classification system by which foreign documents can be accessed from our paper search files. As APS is deployed, the IPC will become the examiners' main search resource for foreign patent information. Consequently, continuing development of IPC based paper search files and building of the foreign patent portion of APS requires the continuing participation by those knowledgeable of the esoterica of foreign patent literature and, as well, the incorporation of the comprehensive sources of foreign patent data.

This request will institute a program to verify, and as necessary, correct the quality of the assignments by examiners of the IPC categories. Data will be gathered in this new program to identify IPC and organizational areas requiring training emphasis. The training will be structured and provided.

The IPC validity and quality checks, coupled with continuous, focused, training reinforcement, will progressively improve the examiners' abilities to use the IPC as an effective search tool. The continuing contribution of foreign patent expertise to the building of IPC based paper search files and the APS foreign patent module will markedly improve the PTO's coverage of the foreign patent literature in the patent examining process, resulting in significant quality improvement of issued U.S. patents. Failure to take these or similar actions will result in a continuation of the PTO's marginal coverage of the foreign patent literature and a progressive degradation of the quality of U.S. patents in relation to the patents of other issuing authorities, i.e., the European Patent Office.

Information Dissemination Automation (-$686,000)

This change consists of two parts. An increase of $342,000 is requested to purchase magnetic tapes to fill customer orders and to support the Trilateral data exchange agreement with the Japanese Patent Office (JPO) and the European Patent Office (EPO). One of the primary objectives of the PTO is to satisfy the public's demands for dissemination of PTO information. This initiative is fully funded by user fees.

A decrease of $1,028,000 is requested for the Information Dissemination share of the costs of the Automated Patent System. This system is designed to improve the quality of search and retrieval. The 1991 estimate for automation initiatives is explained in detail in the Automation Summary section of the Executive Direction and Administration budget activity.

(Dollars in thousands)

Information Dissemination Automation	1991 Base	1991 Estimate	Increase/ (Decrease)
Automated Patent System	$13,147	$12,119	($1,028)
Management and Administrative Systems	0	342	342
Total	$13,147	$12,461	($686)

The personnel and object class detail for this line item increase are shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Information Dissemination
Subactivity: Data and Document Retrieval Systems
Program Change: Patent Search File Integrity and Examiner Search Services

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	511
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation.................	15
	Total Personnel Compensation..............	526
12.0	Personnel Benefits...........................	135
21.0	Travel and Transportation of Persons.........	2
22.0	Transportation of Things.....................	0
23.1	Rental Payments to GSA.......................	0
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	32
24.0	Printing and Reproduction....................	18
25.0	Other Services...............................	889
26.0	Supplies and Materials.......................	506
31.0	Equipment....................................	35
	Total Program Change.........................	2,143

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Information Dissemination
Subactivity: Data and Document Retrieval Systems
Program Change: Patent Search File Integrity and Examiner Search Services

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Patent Classifier (International)	GS-15	3	59,216	177,648
Patent Classifier (International)	GS-14	2	50,342	100,684
Supervisory Technical Information Specialist	GS-13	1	42,601	42,601
System Administrator	GS-12	1	35,825	35,825
Technical Information Specialist	GS-12	2	35,825	71,650
Data Control Technician	GS-09	1	24,705	24,705
Library Technician	GS-07	1	20,195	20,195
Data Entry Technician	GS-07	1	20,195	20,195
Editorial Assistant	GS-06	1	19,386	19,386
Documentation Project Assistant	GS-05	8	16,305	130,440
Document Processing Clerk	GS-04	3	14,573	43,719
Clerk Typist	GS-04	1	16,517	16,517
Total Salaries		25		703,565
Less: Lapse		5		192,565
Total Full-Time Permanent		20		511,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	20
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	20
Authorized Positions:	
Full-Time Permanent	25
Other Than Full-Time Permanent	0
Total Authorized Positions	25

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Executive Direction
and Administration

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase / (Decrease) From 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Commissioner..........................	Pos./BA	6	$748	9	$506	9	$594	9	$594	0	$0
	FTE/Obl.	8	660	7	551	7		7		0	
Solicitor.............................	Pos./BA	26	1,985	25	1,493	25	1,698	26	1,770	1	72
	FTE/Obl.	24	1,886	23	1,612	23		24		1	
Legislation & international affairs....	Pos./BA	19	1,670	29	1,537	29	1,786	29	1,786	0	0
	FTE/Obl.	20	1,546	25	1,673	25		25		0	
Management planning..................	Pos./BA	130	6,876	119	5,566	119	6,181	127	6,910	8	729
	FTE/Obl.	121	6,825	122	6,011	123		129		6	
Administrative services...............	Pos./BA	78	3,879	51	2,692	56	3,096	60	3,358	4	262
	FTE/Obl.	73	3,582	73	2,931	78		81		3	
Automation...........................	Pos./BA	217	29,664	223	23,238	223	23,270	241	26,126	18	2,856
	FTE/Obl.	220	26,503	221	24,735	221		249		28	
Quality review........................	Pos./BA	15	1,239	16	1,125	16	1,190	17	1,315	1	125
	FTE/Obl.	15	1,228	15	1,169	15		16		1	
Space Acquisition and Management.......	Pos./BA	0	0	3	22,479	3	23,477	3	29,498	0	6,021
	FTE/Cbl.	0	0	3	22,679	3		3		0	
Subtotal..............................	Pos./BA	491	46,061	475	58,636	480	61,292	512	71,357	32	10,065
	FTE/Obl.	481	42,230	489	61,361	495		534		39	
Revisions to 1990 FTE.................				43							
Total requirements....................	Pos./BA	491	46,061	475	58,636	480	61,292	512	71,357	32	10,065
	FTE/Obl.	481	42,230	532	61,361	495		534		39	
Offsetting fee collections............	BA	-	14,289	-	23,327	-	24,996	-	34,070	-	9,074
	Obl.	-	11,844	-	23,327						
Financing from prior year funds........	BA	-	2,957		...						
	Obl.		...		...						
Fees sequestered......................	BA		...	+	325						
	Obl.		...		...						
Net request...........................	BA		28,815		35,634		36,296		37,287		991
	Obl.		30,386		38,034						

Department of Commerce
Patent and Trademark Office
Salaries and Expenses

JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Obligations in Thousands)

Activity: Executive Direction and Administration

Goals and Objectives

Goals:
- Maintain patent pendency at 18 months and improve patent quality.
- Stimulate productivity and economic development.
- Provide executive direction for the administration of the Patent and Trademark Office (PTO).
- Administer legal, international, legislative, management and automation activities.
- Maximize the effectiveness of patent and trademark systems in the United States.
- Automate the Patent and Trademark processes by 1990's.
- Strengthen worldwide protection of intellectual property.

Objectives:
- Improve management planning and control processes through automation, systems analysis methodology, and the centralization of financial management and budgetary responsibility.
- Improve the protection of intellectual property rights in the U.S. and abroad by developing domestic legislation and international agreements.
- Provide support services to all PTO operations promptly, efficiently and competently.
- Perform quality reviews of examined patent applications.
- Provide centralized guidance, coordination and implementation of PTO internal improvements.
- Administer and manage automation initiatives to aid in developing new search, retrieval and display systems.

Proposed Legislation

Public Law 100-703 authorizes the Patent and Trademark Office programs through fiscal year 1991.

Base Program

Commissioner

The Office of the Commissioner, in cooperation with the Department of Commerce and OMB, determines domestic patent and trademark policies, and, in cooperation with the Department of State, the United States Trade Representative, and other DOC bureaus develops international intellectual property policies and participates in interagency groups to develop intellectual property policy recommendations. The Commissioner directs the examination and issuance of patents as well as the examination and registration of trademarks, and directs the dissemination of information contained in patent and trademark documents. The Commissioner renders quasijudicial rulings on patent and trademark issues arising in the PTO and serves as a liaison with intellectual property bar associations, industry, the public, and between the Administration and Congress.

Solicitor

The Solicitor handles all litigation to which the Commissioner is a party; investigates legal matters for the Commissioner; prepares opinions and decisions on legal questions; provides advice and assistance on legislative matters, application of administrative laws and regulations and maintains the Solicitor's library.

The Office of Enrollment and Discipline examines and registers attorneys and agents to practice before the Patent and Trademark Office; investigates complaints of misconduct and brings disbarment proceedings against registered attorneys and agents.

Legislation and International Affairs

The Office of the Assistant Commissioner for External Affairs supervises the Office of Legislation and International Affairs and the Office of Public Affairs.

The Office of Legislation and International Affairs drafts legislative and policy proposals concerning intellectual property matters, prepares supporting documentation to carry out the legislative program and the policies of the Commissioner, and reviews and prepares analyses of other legislative proposals concerning intellectual property matters. This Office prepares Congressional testimony for the Commissioner and other PTO and Department officials and maintains a liaison with Congress, the intellectual property bar associations, industry, and others concerned with proposed and pending legislation.

This Office promotes international development of intellectual property systems and advocates improvements and more cost effective means of protecting intellectual property rights of U.S. nationals throughout the world. This includes developing and maintaining multilateral systems for protection of intellectual property rights; assisting in the establishment of bilateral agreements with other intellectual property offices; participating in the intellectual aspects of trade consultations; promoting the establishment of adequate systems in developing countries for the protection of intellectual property rights; and developing international standards and procedures to encourage foreign filing by U.S. nationals and to facilitate access to the information contained in patent and trademark documents.

The Office of Public Affairs arranges media meetings for the Commissioner and other senior PTO officials, prepares press releases on PTO activities, and through printed materials, informs the public of the patent and trademark systems and the operation of the PTO.

Management Planning

Management planning offices implement budget, fiscal, personnel and long range planning policy. Offices included in the management planning function develop and monitor the long and short-term objectives of the PTO; assist on personnel matters, recruitment, position classification and pay administration, employee development, personnel/payroll processing, records administration, and employee labor relations programs; operate a management information system providing current and accurate information on PTO program production; and maintain PTO budgetary and financial systems.

Administrative Services

Support services for PTO are: administration of equal employment opportunity programs; printing services and maintenance of official records; procurement support and contract management; supply, property, and photocopier management; telecommunication, space and lease management; and travel and shuttle services. Other services include: managing performance measurement systems, evaluation of proposals on organizational changes and administrative issuances, and coordination of government-wide management improvement programs.

Automation

This function is responsible for implementation of the Office-wide Automation Master Plan. This line item provides funds for patent and data base automation and to direct, plan and provide automation support for the PTO. Support is provided for existing ADP systems as well as for the patent and trademark automation programs. Support includes: systems analysis and design; acquisition or development of centralized computer systems, software and automated information systems; installation and test of systems; operation and maintenance of information systems; and operation of general purpose ADP and communication equipment.

Quality Review

The Quality Review program evaluates and monitors patent product quality in the examining process by conducting reviews on a four percent sample of all regular patent applications allowed by the Patent Examining Corps. The Quality Review program also provides feedback to management for evaluation and corrective purposes and makes recommendations for procedural change.

Space Acquisition and Management

The PTO currently leases all of its space for employees and workstations from private contractors, with the exception of 49,037 square feet in the Department of Commerce Hoover Building. The majority of the PTO space holdings are located in 10 office buildings in the Crystal City, Arlington, Virginia area and comprise 848,404 square feet of space. Another 70,345 square feet of space is located in three warehouses in Arlington and Newington, Virginia and is primarily used for the filing and retrieval of patent and trademark files. Since 1986, the PTO has been responsible for the management of nine buildings in the Crystal City complex where the PTO is the major Federal lease holder. Management responsibilities include planning, directing, coordinating, monitoring, and administering the PTO's delegation agreement for the management of all real property occupied by the PTO. These responsibilties were delegated to the PTO from GSA when that agency decentralized its lease management functions. The yearly rental payments and management costs represent a sizable portion of the PTO obligations.

Summary of Workload and Performance Data

Commissioner:

The Commissioner testified before Congressional committees on general oversight, the budget, and other legislative proposals and continued to implement the plan to reduce patent and trademark application pendency times and to automate the PTO. He participated in domestic and international patent and trademark activities, including various meetings of patent and trademark law associations. The Commissioner's Education Round Table continues to bring together experts in critical and creative thinking skills to guarantee that Americans will have the innovative skills to meet the challenges of an increasingly competitive world.

Summary of Workload and Performance Data

Solicitor:

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Cases disposed	132	142	170	170
Freedom of Information Act requests	143	132	140	140
Legal opinions rendered	513	503	800	800
Answers to inquiries	5,787	4,358	3,000	3,000
Publication of Patent and Trademark suits	2,355	1,856	2,500	2,500
PTO Employee Depositions	27	14	30	30
PTO Decisions forwarded for Publication	158	118	170	170
Attorneys tested	913	1,071	900	1,050
Attorneys registered	455	511	450	550
Disciplinary proceedings	3	3	3	5

Legislation and International Affairs:

The Office of Legislation and International Affairs prepared testimony and urged Congressional action on a wide variety of legislative proposals and intellectual property rights, including legislation concerning patenting higher life forms. The Office provided technical assistance in drafting intellectual property legislation forwarded by the Secretary of Commerce and prepared background material. The Office participated in international efforts to enhance the protection of intellectual property and the administration of intellectual property laws, such as the consultative meetings on the revision of the Paris Convention, Committee of Experts on Harmonization of Patent Laws, and the Trilateral Conference on Automation. The Office also participated in bilateral negotiations on strengthening intellectual property laws with developing countries, including Korea, Taiwan, Thailand, Indonesia, Turkey, Brazil, Chile, Egypt and Saudi Arabia and training and assistance programs in the U.S. and abroad for nationals of developing countries including China, Korea, Taiwan, Saudi Arabia, and Tanzania. Also, the Office worked with the Department of Commerce, Department of State, and the U.S. Trade Representative on trade-related intellectual property issues, such as negotiation of international standards within the framework of the GATT, providing technical assistance in the "Section 301" process and leading a working group on patent issues in Japan.

Management Planning:

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Accounting transactions processed............	24,451	27,050	24,500	24,500
Deposit account transactions processed.......	410,824	428,706	430,000	472,495
Cash receipt transactions processed..........	743,680	783,071	750,000	790,195
Personnel actions processed..................	15,818	13,743	19,000	24,200
Payroll actions processed....................	17,702	20,357	23,000	27,830

These offices continued cooperative automation exchange efforts with the European and Japanese Patent Offices, and carried out the fiscal and budgetary responsibilities of the PTO.

Automation:

Automated Patent System (APS):
Progress in responding to recommendations of Industry Review Panel; successful stability test of APS image search and retrieval capability in an examining group demonstrates viability of APS as an operational system in a production environment; significantly strengthened technical, administrative and contract management of APS program; backfile image capture of U.S. patents completed in 1989; APS text search capabilities available to the public in the patent Public Search Room.

Trademark Automation:
Trademark examining attorneys use T-Search in a production environment; T-Search available to the public in the Trademark Public Search Room; continued efforts to correct errors in trademark backfile data bases.

Management and Administrative Systems:
Support operations maintained on the A-15 mainframe; major procurement for equipment (terminals, printers, bar code readers, etc.) which will communicate with the A-15 mainframe, will be installed in distributed user areas to facilitate management and administrative support.

Quality Review:

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Regular four percent sample	3,483	3,727	3,500	4,100
Reissue: 15 percent sample	28	50	36	40
Reissue screening: 100 percent sample	222	298	310	310
Reexamination: 15 percent sample	26	36	38	38

Space Acquisition and Management:

Summary of Workload and Performance Data

Performance Measure:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Square Feet Leased	N/A	936,796	967,786	1,145,948
Square Feet Managed	N/A	752,251	764,851	887,371

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Solicitor....................................	Pos./BA	25	$1,698	26	$1,770	1	$72
	FTE	23		24		1	

Maintain Patent Attorney Roster: (1 permanent position, 1 FTE, $72,000)
An increase of one position, one FTE and $72,000 is necessary to handle the increased number of applicants desiring to be admitted as registered patent attorneys or agents to practice before the PTO. The Office of Enrollment and Discipline develops and grades tests for admission to practice before the PTO. The new position would be responsible for preparing and grading the registration examinations, as well as reviewing and preparing these decisions of persons not meeting scientific and technical training requirements. Over the past several years, the number of applicants who have taken the semiannual tests has risen dramatically from 722 in 1986 to 1,263 in 1989, an increase of 75 percent.

The Office of Enrollment and Discipline (OED) also investigates complaints of unethical conduct by persons recognized to practice before the PTO. These investigations take on the average from 6 to 18 months to complete. Presently at least one staff-year of the staff attorneys who investigate these complaints must be devoted to preparing, administering and grading the registration examinations as well as rendering decisions on scientific and technical training requirements of persons seeking admission to the examinations.

If the PTO is to continue to investigate and register new attorneys and agents to practice before the PTO and to reduce the backlog of pending investigations, the increase of one position must be obtained. This function is totally fee supported.

The personnel and object class detail for this increase is shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Solicitor
Program Change: Maintain Patent Attorney Roster

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	36
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation.................	0
	Total Personnel Compensation..............	36
12.0	Personnel Benefits...........................	10
21.0	Travel and Transportation of Persons.........	0
22.0	Transportation of Things.....................	0
23.1	Rental Payments to GSA.......................	0
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	1
24.0	Printing and Reproduction....................	0
25.0	Other Services...............................	24
26.0	Supplies and Materials.......................	1
31.0	Equipment....................................	0
	Total Program Change.........................	72

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Solicitor
Program Change: Maintain Patent Attorney Roster

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Enrollment Examiner	GS-14	1	50,342	50,342
Total Salaries		1		50,342
Less: Lapse		0		14,342
Total Full-Time Permanent		1		36,000

Personnel Data	Number of Positions
Full-Time Equivalent Employment:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	1
Authorized Positions:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Authorized Positions	1

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Management Planning..........................	Pos./BA	119	$6,181	127	$6,910	8	$729
	FTE	123		129		6	

Maintain Personnel Staffing Ratio : (8 permanent positions, 6 FTE, $729,000)
The PTO requests 8 positions, 6 FTE and $729,000 for personnel staffing enhancements. The Office of Personnel cannot keep pace with the demands of servicing the steadily increasing staffing levels of the PTO. The President's Council on Management Improvement recommends a staffing ratio of one personnel official to 60 employees. The personnel office is currently staffed at one personnel official to 67 employees. The population of the PTO is expected to reach a level of 5,017 employees for FY 1991 as a result of the rapid growth in application filings and the passage of the Intent-to-Use legislation.

This initiative also includes funds to broaden the recruitment base in shortage category occupations. It is becoming increasingly difficult to recruit professional employees, i.e. computer specialists, librarians and technical information specialists. This request will enable PTO to recruit in areas outside of Washington, D.C. and to increase advertising in journals and professional magazines.

The personnel and object class detail for this increase is shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Management Planning
Program Change: Maintain Personnel Staffing Ratio

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	184
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	33
	Total Personnel Compensation	217
12.0	Personnel Benefits	49
21.0	Travel and Transportation of Persons	10
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	14
24.0	Printing and Reproduction	26
25.0	Other Services	394
26.0	Supplies and Materials	12
31.0	Equipment	7
	Total Program Change	729

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Management Planning
Program Change: Maintain Personnel Staffing Ratio

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Personnel Supervisor	GS-13	1	42,601	42,601
Personnel Specialists	GS-12	5	35,825	179,125
Personnel Clerks	GS-05	2	16,305	32,610
Total Salaries		8		254,336
Less: Lapse		2		70,336
Total Full-Time Permanent		6		184,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	6
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	6
Authorized Positions:	
Full-Time Permanent	8
Other Than Full-Time Permanent	0
Total Authorized Positions	8

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Administrative Services......................	Pos./BA	56	$3,096	60	$3,358	4	$262
	FTE	78		81		3	

Essential Program Support: (4 permanent positions, 3 FTE, $262,000)

The PTO requests an increase of four positions, three FTE, and $262,000 to maintain the procurement support service. The workload of the procurement office increased by about 50 percent in FY 1988 due to increasing PTO staff which was driven by increased applications. The Department has also added to the office's workload by requiring tighter reviews, increased oversight, and data systems input.

In addition, the maintenance of the patent pendency reduction goal requires that the award of all contracts and purchase orders is completed within specified time frames. This is crucial in supporting the secretarial goal.

An increase in resources would lead to savings on every contract action because of the ability of each specialist to devote more time to each action and complete thorough business and pricing analyses. Contract closeouts would increase in number which could free up thousands of dollars which have been committed and obligated but not disbursed. Non-tangible benefits would include the ability to maintain procurement processesing goals in light of steadily increasing workloads.

If resources are not allocated, current services will deteriorate and the detailed analysis of contract actions will not occur, which will result in greater government spending and waste.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Administrative Services
Program Change: Essential Program Support

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	89
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation.................	20
	Total Personnel Compensation..............	109
12.0	Personnel Benefits...........................	24
21.0	Travel and Transportation of Persons.........	5
22.0	Transportation of Things.....................	2
23.1	Rental Payments to GSA.......................	0
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	12
24.0	Printing and Reproduction....................	2
25.0	Other Services...............................	71
26.0	Supplies and Materials.......................	8
31.0	Equipment....................................	29
	Total Program Change.........................	262

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Administrative Services
Program Change: Essential Program Support

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Acquisition Planning Chief	GS-13	1	42,601	42,601
Contract Specialist	GS-12	1	35,825	35,825
Contract Administrator	GS-09	1	24,705	24,705
Small Purchase Agent	GS-07	1	20,195	20,195
Total Salaries		4		123,326
Less: Lapse		1		34,326
Total Full-Time Permanent		3		89,000

Personnel Data	Number of Positions
Full-Time Equivalent Employment:	
Full-Time Permanent	3
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	3
Authorized Positions:	
Full-Time Permanent	4
Other Than Full-Time Permanent	0
Total Authorized Positions	4

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Automation	Pos./BA	223	$23,270	241	$26,126	18	$2,856
	FTE	221		249		28	

Automation (Executive Direction and Administration) -

This increase for the Automation line item is comprised of the following initiatives:

	Permanent Positions	Total FTE	Amount
APS Management and Operations	6	6	($1,093)
Maintain and Secure PTO Archives	0	3	207
T-Search Systems Analysis	2	2	92
Database Integrity	9	16	2,644
Management and Administrative Systems	1	1	1,006
Total	18	28	$2,856

APS Management and Operations (6 permanent positions, 6 FTE, -$1,093)
The PTO requests a net change of six permanent positions, six FTE and -$1,093,000 for APS Management and Operations.

An increase of $346,000 is requested to support six permanent positions and six FTE for the APS Contracts Staff which provides contracting services, support and guidance in all APS contracting efforts. A separate APS contracts staff was recommended by the Department. There are no base funds for this function.

A decrease of $1,439,000 is requested for the Automated Patent System (APS). This decrease reflects the decreased share of the costs of the Automated Patent System in the Automation line item.

Maintain and Secure PTO Archives (3 temporary positions, 3 FTE, $207,000)
The PTO requests an increase of three temporary positions, three FTE and $207,000 to maintain and secure PTO archive records.

Of this amount, $74,000 is requested to hire a contractor to perform required maintenance on the image capture equipment located in the National Underground Storage (NUS) facility in Boyers, Pennsylvania. The existing image capture contract (with CMC) is scheduled to terminate in early 1990. The PTO has purchased the equipment that was installed by CMC. The image scanning capabilities (along with maintenance) are necessary to provide weekly updates to the PTO's Classified Search and Image Retrieval System, to rework images in error, and to capture miscellaneous materials such as non-patent literature. Without a maintenance contract the in-house image capture operation would be brought to a halt as the equipment failed.

This initiative also includes $133,000 to support three temporary positions and three FTE and for additional space at NUS to store magnetic tapes. The staff resources support a second shift in the computer operations. The current tape library in Boyers will reach capacity in FY 1989. The PTO anticipates an increase in the number of orders for magnetic tapes. Without the three positions delays will occur in providing tape copies to customers.

T-Search Systems Analysis (2 permanent positions, 2 FTE, $92,000)
The PTO requests an increase of two permanent positions, two FTE and $92,000 to support the systems analysis for the automated trademark systems. T-Search and TRAM are an integral part of Trademark examination and as such must be updated and enhanced to keep current with changing rules and regulations. The implementation of provisions of the Trademark Law Revision Act also imposed additional requirements on system analysis.

This initiative is fully funded by Trademark user fees.

Database Integrity (9 permanent, 7 temporary positions, 16 FTE, $2,644,000)
The PTO requests an increase of nine permanent positions, seven temporary positions, 16 FTE and $2,644,000 to support the Ongoing Image Capture Project and the optical character recognition conversion contracts, to prepare contracting requirements, to assist and manage daily contracting activities, to handle customer growth, the increased volume of requests and ongoing Trilateral commitments, and to coordinate comprehensive marketing programs for PTO products. This also includes a temporary staff to conduct quality assurance of the image data base and to complete error corrections of the text data base, perform image capture functions at PTO, and to provide clerical services to handle administrative workload.

Management and Administrative Systems (1 permanent position, 1 FTE, $1,006,000)

Of this amount, $331,000 is requested to migrate the PALM system from the current UNISYS/DMS environment to a more advanced data base environment with a fourth generation language, run on an IBM compatible mainframe. The current version of PALM dates back to the early 1980's and has evolved gradually over the intervening years through modification and expansion of the software. The development and implementation of a redesigned PALM system will enable the system to absorb anticipated increases in workload which will stem from projected increases in application filings. If this initiative is not funded, the PTO will accept certain risks associated with the ability of current architecture to absorb substantial increases in future workloads.

This amount also includes $291,000 to establish a network to integrate the various automated systems within the PTO. The PTO presently has a number of independent systems such as APS, T-Search, PALM/TRAM, CCI and the ACIS network. These networks are usually incompatible with one another and involve duplicative cabling to many of the same locations. This initiative will allow the various systems to be interconnected and will reduce the need for duplicative cabling.

This initiative also includes $39,000 for one permanent position and one FTE to provide backup to critical personnel responsible for ACIS budget, APS contract financial management, and the preparation of reports to DOC and external agencies such as OMB and GAO. With the growth in the ACIS programs over the past several years, the complexity of maintaining effective controls has greatly increased.

Finally, this initiative includes an increase of $345,000 to fund cost increases associated with the purchase and installation of Lot B equipment. Lot B equipment is the peripheral equipment necessary for the system users to access and interact with the A-15 mainframe computer.

(Dollars in thousands)

Automation (Executive Direction and Administration)	1991 Base	1991 Estimate	Increase/ (Decrease)
Automated Patent System	$9,163	$7,724	($1,439)
Management and Administrative Systems	14,107	18,402	4,295
Total	23,270	26,126	2,856

The position and object class detail for this line item increase are shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Automation
Program Change: Executive Direction Automation Initiatives

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	626
11.3	Other Than Full-Time Permanent Compensation	152
11.5	Other Personnel Compensation	24
	Total Personnel Compensation	802
12.0	Personnel Benefits	177
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	113
24.0	Printing and Reproduction	0
25.0	Other Services	1,647
26.0	Supplies and Materials	1
31.0	Equipment	116
	Total Program Change	2,856

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Automation
Program Change: Executive Direction Automation Initiatives

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Supervisory Contract Specialist	GS-15	1	59,216	59,216
Contract Cost/Price Analyst	GS-14	1	50,342	50,342
Contract Specialist	GS-14	1	50,342	50,342
Program Analyst	GS-14	1	50,342	50,342
Program Analyst	GS-13	2	42,601	85,202
Contract Administrator	GS-13	1	42,601	42,601
Program Analyst	GS-12	2	35,825	71,650
Computer Systems Analyst	GS-12	1	35,825	35,825
Program Analyst	GS-11	1	29,891	29,891
Contract Specialist	GS-11	1	29,891	29,891
Program Analyst	GS-09	1	24,705	24,705
Program Analyst	GS-09	4	24,705	98,820
Secretary (Typing)	GS-06	1	19,386	19,386
Total Salaries		18		648,213
Less: Lapse		0		22,213
Total Full-Time Permanent		18		626,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	18
Other Than Full-Time Permanent	10
Total Full-Time Equivalent Employment:	28
Authorized Positions:	
Full-Time Permanent	18
Other Than Full-Time Permanent	10
Total Authorized Positions	28

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Quality Review...............................	Pos./BA	16	$1,190	17	$1,315	1	$125
	FTE	15		16		1	

Patent Quality Review: (1 permanent position, 1 FTE, $125,000)
An increase of one position, one FTE and $125,000 is necessary to address the increased workload arising from Patent Examiners' allowances and the resultant increase in the number of cases comprising the four percent sample. The Office of Quality Review reviews the application of substantive statutory criteria for patentability; the adequacy of the examiner search of prior patent or other literature; and the adherence to examining procedures. The Office provides information to managers and examiners on the result of its review and makes recommendations for maintaining or improving the quality of examination. In order to maintain the sampling of four percent, this increase is necessary. This initiative is fully funded by fees.

The personnel and object class detail for this increase is shown on the following pages.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Quality Review
Program Change: Increased Workload for Patent Quality Review

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation	43
11.3	Other Than Full-Time Permanent Compensation	0
11.5	Other Personnel Compensation	24
	Total Personnel Compensation	67
12.0	Personnel Benefits	11
21.0	Travel and Transportation of Persons	0
22.0	Transportation of Things	0
23.1	Rental Payments to GSA	0
23.2	Rental Payments to Others	0
23.3	Communications, Utilities, and Other Rent	1
24.0	Printing and Reproduction	0
25.0	Other Services	45
26.0	Supplies and Materials	1
31.0	Equipment	0
	Total Program Change	125

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Executive Direction and Administration
Subactivity: Quality Review
Program Change: Increased Workload for Patent Quality Review

Position Title	GS-Grade	Number of Positions	Annual Salary	Total Salaries
Patentability Review Examiner	GS-15	1	59,216	59,216
Total Salaries		1		59,216
Less: Lapse		0		16,216
Total Full-Time Permanent		1		43,000

Personnel Data	
Full-Time Equivalent Employment:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Full-Time Equivalent Employment:	1
Authorized Positions:	
Full-Time Permanent	1
Other Than Full-Time Permanent	0
Total Authorized Positions	1

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Space Management............................	Pos./BA	3	$23,477	3	$29,498	0	$6,021
	FTE	3		3		0	

Space Acquisition and Management ($6,021,000):
The PTO requests an increase of $6,021,000 (object class 23.1) for the leasing of additional space in Crystal City, Virginia.

The PTO has outgrown its leased space holdings in the Crystal City complex. The continued growth in the Patent Examining Corps; the pending growth in the Trademark Examination program due to implementation of provisions of the Trademark Law Revision Act of 1988 (intent-to-use); needed expansion for patent and trademark search files; and inadequate training facilities, particularly for the Patent Academy, have all contributed to a very dire need for more space. In 1989, the General Services Administration (GSA) approved the acquisition of 180,000 square feet of office space. An additional 49,000 square feet will be needed in 1991 to provide room for the positions that are being requested in the 1991 budget request. The cost for this additional space will total $6,021,000 in 1991. Failure to acquire this space will prevent the achievement and maintenance of the primary PTO goals as needed staff can not be hired in 1990 or 1991 since space will not be available.

This initiative is fully financed by patent and trademark fees.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in Thousands)

Activity: Executive Direction and Administration
Subactivity: Space Acquisition and Management
Program Change: Space Acquisition and Management

Object Class	Object Class Title	FY 1991 Increase/ (Decrease)
11.1	Full-Time Permanent Compensation.............	0
11.3	Other Than Full-Time Permanent Compensation..	0
11.5	Other Personnel Compensation.................	0
	Total Personnel Compensation..............	0
12.0	Personnel Benefits...........................	0
21.0	Travel and Transportation of Persons.........	0
22.0	Transportation of Things.....................	0
23.1	Rental Payments to GSA.......................	6,021
23.2	Rental Payments to Others....................	0
23.3	Communications, Utilities, and Other Rent....	0
24.0	Printing and Reproduction....................	0
25.0	Other Services...............................	0
26.0	Supplies and Materials.......................	0
31.0	Equipment....................................	0
	Total Program Change..........................	6,021

Automation Master Plan Summary

The following tables show cost estimates for the Automation Master Plan (1983-1995) in current dollars reflecting anticipated inflation beyond 1991. The Automation Master Plan is currently being revised. Table 1 bridges from the line item format to the three main systems. These systems are defined as follows:

Patent Automation - the automation of patent related activities within the PTO through the implementation of the Automated Patent System (APS). APS includes automation of the patent and trademark databases which include systems for image and text capture. Cost projections represent current cost estimates of the APS contract, as well as cost estimates for APS contract support.

Trademark Automation - automation of trademark searching activities within the PTO through implementation of the Trademark Search System (T-SEARCH) through 1986, and the automation of trademark processing activities within the PTO through TRAM and T-Search from 1987 on.

Management and Administrative Systems - those automation activities which support existing ADP systems and both the patent and trademark automation programs. Included in this category are the automation staff, various support contracts and the existing computer facility and related operations that monitor patent and trademark process flows, and perform accounting and management information functions.

TABLE 1.

REVISED AMP--LINE ITEM CROSSWALK TO NEW SYSTEMS
$000'S--INCLUDES INFLATION OUTYEARS 1992-1995

BUDGET ACTIVITY	YEAR	AUTOMATED PATENT SYSTEM	TRADEMARK AUTOMATION	MANAGEMENT & ADMINISTRATIVE SYSTEMS	PLAN TOTAL	PRIOR YEAR CARRYOVER	REVISED PLAN	ACTUAL TOTAL	BALANCE
PATENT PROCESS	1983	1,860	0	1,215	3,075	0	3,075	2,225	850
	1984	5,120	0	1,100	6,220	850	7,070	7,154	(84)
	1985	10,331	0	75	10,406	0	10,406	10,306	100
	1986	13,518	0	700	14,218	329	14,547	14,289	258
	1987	23,945	0	500	24,445	258	24,703	24,790	(87)
	1988	30,379	0	300	30,679	3,002	33,681	32,985	696
	1989	24,667	0	310	24,977	3,453	28,430	27,786	644
	1990	13,062	0	265	13,327	46	13,373		
	1991	25,954	0	0	25,954				
	1992	27,528	0	0	27,528				
	1993	39,948	0	0	39,948				
	1994	39,521	0	0	39,521				
	1995	32,392	0	0	32,392				
TRADEMARK PROCESS	1983	0	416	517	933	0	933	517	416
	1984	0	580	0	580	416	996	996	0
	1985	0	305	0	305	200	505	581	(76)
	1986	0	1,133	0	1,133	0	1,133	1,263	(130)
	1987	0	2,085	0	2,085	0	2,085	710	1,375
	1988	0	2,056	0	2,056	1,375	3,431	1,973	1,458
	1989	0	2,126	0	2,126	1,458	3,584	2,509	1,075
	1990	0	1,849	0	1,849	26	1,875		
	1991	0	3,330	0	3,330				
	1992	0	3,512	0	3,512				
	1993	0	3,741	0	3,741				
	1994	0	3,550	0	3,550				
	1995	0	3,470	0	3,470				
INFORMATION DISSEMINATION	1983	400	0	100	500	0	500	250	250
	1984	1,180	0	20	1,200	250	1,450	1,230	220
	1985	3,885	0	140	4,025	0	4,025	4,025	0
	1986	9,598	0	0	9,598	0	9,598	9,272	326
	1987	8,595	0	0	8,595	129	8,724	8,914	(190)
	1988	9,318	0	0	9,318	(180)	9,138	9,024	114
	1989	11,598	0	0	11,598	898	12,496	12,310	186
	1990	13,147	0	0	13,147	45	13,192		
	1991	12,119	0	342	12,461				
	1992	12,475	0	355	12,830				
	1993	12,812	0	369	13,181				
	1994	13,141	0	382	13,523				
	1995	13,453	0	393	13,846				

TABLE 1.

REVISED AMP--LINE ITEM CROSSWALK TO NEW SYSTEMS
$000'S--INCLUDES INFLATION OUTYEARS 1992-1995

BUDGET ACTIVITY	YEAR	AUTOMATED PATENT SYSTEM	TRADEMARK AUTOMATION	MANAGEMENT & ADMINISTRATIVE SYSTEMS	PLAN TOTAL	PRIOR YEAR CARRYOVER	REVISED PLAN	ACTUAL TOTAL	BALANCE
EXECUTIVE DIRECTION AND ADMINISTRATION	1983	2,141	0	7,455	9,596	933	10,529	9,596	933
	1984	392	225	10,650	11,267	1,218	12,485	12,423	62
	1985	838	2,339	13,145	16,322	0	16,322	15,456	866
	1986	2,500	0	11,501	14,001	2,545	16,546	15,167	1,379
	1987	2,916	0	11,664	14,580	7,716	22,296	20,779	1,517
	1988	8,279	0	14,556	22,835	1,543	24,378	24,184	194
	1989	9,730	0	14,755	24,485	5,179	29,664	26,503	3,161
	1990	9,163	0	14,075	23,238	1,497	24,735		
	1991	7,724	0	18,402	26,126				
	1992	7,724	0	18,994	26,718				
	1993	7,724	0	19,603	27,327				
	1994	7,724	0	20,180	27,904				
	1995	7,724	0	20,727	28,451				
TOTAL	1983	4,401	416	9,287	14,104	933	15,037	12,588	2,449
	1984	6,692	805	11,770	19,267	2,734	22,001	21,803	198
	1985	15,054	2,644	13,360	31,058	200	31,258	30,368	890
	1986	25,616	1,133	12,201	38,950	2,874	41,824	39,991	1,833
	1987	35,456	2,085	12,164	49,705	8,103	57,808	55,193	2,615
	1988	47,976	2,056	14,856	64,888	5,740	70,628	68,166	2,462
	1989	45,995	2,126	15,065	63,186	10,988	74,174	69,108	5,066
	1990	35,372	1,849	14,340	51,561	1,614	53,175		
	1991	45,797	3,330	18,744	67,871				
	1992	47,727	3,512	19,349	70,588				
	1993	60,484	3,741	19,972	84,197				
	1994	60,386	3,550	20,562	84,498				
	1995	53,569	3,470	21,120	78,159				

AMOUNTS FOR 1984 INCLUDE A NONRECURRING REDEPLOYMENT OF RESOURCES TO REFLECT ACTUAL APS CONTRACT PROVISIONS.
AMOUNTS FOR 1986 REFLECT A NONRECURRING SEQUESTRATION DUE TO THE BALANCED BUDGET AND EMERGENCY DEFICIT CONTROL ACT OF 1985.
THE REVISED PLAN AMOUNTS INCLUDE PRIOR YEAR UNOBLIGATED BALANCES.

Table 2, which follows, takes the three systems inflated totals from the bottom of Table 1 and divides them into the categories defined as follows:

- Workstations - cost items for the workstation configuration of each of the automated systems. There are four categories of work- stations required to support the automated systems:
    - Full APS (text and image) workstations for examiner search and retrieval;
    - Text search (terminals for examiners) and office automation workstations for management information;
    - Print servers to control printed output from APS;
    - Data capture workstations for control of input to APS.

  The cost includes all associated hardware to support the workstation configuration.

- Other equipment - cost items for system architecture for each of the automated systems. This cost includes all associated hardware except workstations to support full operations of each system not treated as a contractor service.

- Licensed software - cost items for the acquisition, license and development of all software to support the automated systems.

- Contractor services - cost items for software and hardware maintenance, hardware replacement parts, all direct labor and overhead to support system development, software development, acquisition support and general support. This also includes hardware, software and other systems costs where such are imbedded in the cost of a contractor service, as well as costs associated with contractor fee and other administrative costs.

- Staff and support - cost items for the existing ADP system, PTO staff and various contractor support for all automation areas.

TABLE 2.

REVISED AMP--SYSTEMS CROSSWALK TO SYSTEM COMPONENTS
(Dollars in thousands)

SYSTEM	YEAR	WORK-STATIONS	OTHER EQUIPMENT	LICENSED SOFTWARE	CONTRACTOR SERVICES	STAFF & SUPPORT	PLAN TOTAL	PRIOR YEAR CARRYOVER	REVISED PLAN	ACTUAL TOTAL	BALANCE
AUTOMATED PATENT SYSTEM -APS-	1983	0	0	0	4,401	0	4,401	0	4,401	2,368	2,033
	1984	0	130	330	6,232	0	6,692	1,100	7,792	8,144	(352)
	1985	477	2,199	496	11,882	0	15,054	0	15,054	15,350	(296)
	1986	2,839	7,856	669	14,252	0	25,616	845	26,461	26,017	444
	1987	1,671	8,383	1,212	24,190	0	35,456	5,298	40,754	40,438	316
	1988	3,891	21,294	1,219	21,572	0	47,976	3,190	51,166	50,231	935
	1989	2,500	10,528	1,200	31,767	0	45,995	4,351	50,346	49,069	1,277
	1990	3,274	11,401	1,887	18,855	0	35,417	91	35,508		
	1991	1,746	10,507	1,868	31,676	0	45,797				
TRADEMARK AUTOMATION	1983	0	0	0	416	0	416	0	416	0	416
	1984	171	371	52	211	0	805	1,349	2,154	2,226	(72)
	1985	512	1,112	385	635	0	2,644	200	2,844	2,793	51
	1986	238	522	41	332	0	1,133	419	1,552	1,704	(152)
	1987	0	1,575	0	510	0	2,085	0	2,085	710	1,375
	1988	0	1,207	0	849	0	2,056	1,375	3,431	1,973	1,458
	1989	0	1,248	0	878	0	2,126	1,458	3,584	2,509	1,075
	1990	0	1,066	0	809	0	1,875	26	1,901		
	1991	0	1,193	0	2,137	0	3,330				
MANAGEMENT AND ADMINISTRATIVE SYSTEMS -MAS-	1983	0	1,120	0	1,050	7,117	9,287	933	10,220	10,220	0
	1984	0	1,211	0	2,297	8,262	11,770	285	12,055	11,433	622
	1985	0	1,251	0	1,339	10,770	13,360	0	13,360	12,225	1,135
	1986	0	1,094	0	1,395	9,712	12,201	1,610	13,811	12,270	1,541
	1987	0	967	0	1,971	9,226	12,164	2,805	14,969	14,045	924
	1988	0	1,386	0	2,275	11,195	14,856	1,175	16,031	15,962	69
	1989	0	1,599	0	3,379	10,087	15,065	5,179	20,244	17,530	2,714
	1990	0	1,619	0	1,469	12,594	15,682	1,497	17,179		
	1991	0	2,088	0	1,469	15,187	18,744				
TOTAL	1983	0	1,120	0	5,867	7,117	14,104	933	15,037	12,588	2,449
	1984	171	1,712	382	8,740	8,262	19,267	2,734	22,001	21,803	198
	1985	989	4,562	881	13,856	10,770	31,058	200	31,258	30,368	890
	1986	3,077	9,472	710	15,979	9,712	38,950	2,874	41,824	39,991	1,833
	1987	1,671	10,925	1,212	26,671	9,226	49,705	8,103	57,808	55,193	2,615
	1988	3,891	23,887	1,219	24,696	11,195	64,888	5,740	70,628	68,166	2,462
	1989	2,500	13,375	1,200	36,024	10,087	63,186	10,988	74,174	69,108	5,066
	1990	3,274	14,086	1,887	21,133	12,594	52,974	1,614	54,588		
	1991	1,746	13,788	1,868	35,282	15,187	67,871				

AMOUNTS FOR 1984 INCLUDE A NONRECURRING REDEPLOYMENT OF RESOURCES TO REFLECT ACTUAL APS CONTRACT PROVISIONS.
AMOUNTS FOR 1986 REFLECT A NONRECURRING SEQUESTRATION DUE TO THE BALANCED BUDGET AND EMERGENCY DEFICIT CONTROL ACT OF 1985.
THE REVISED PLAN AMOUNTS INCLUDE PRIOR YEAR UNOBLIGATED BALANCES AND SURPLUS FUNDS.

PTO-104

Changes for FY 1991 Automation Summary

Automated Patent System (APS)

Funding in FY 1991 for Patent Automation is provided by the following budget activities (dollars in thousands):

Budget Activity:	1991 Base	1991 Estimate	Increase (Decrease)
Patent Process	$11,984	$25,954	$13,970
Information Dissemination	13,147	12,119	(1,028)
Executive Direction and Administration	9,163	7,724	(1,439)
Total	$34,294	$45,797	$11,503

The PTO and the Administration have settled on this level of funding for FY 1991. Under the scenario accompanying this budget request, the following major milestones would be accomplished:

- Decision point for expansion of text search to the Patent Depository Libraries.
- While deployment of classified search and image retrieval to Group 210 will take place in FY 1990, further deployment will not be undertaken until later, pending recompetitions and the loading of the Primary Data Storage Devices (Rapid Access Devices).
- While Group 210 image data will be loaded on primary storage (RAD) in FY 1990, the data load for all remaining U.S. patent images will not be completed until later, and foreign patent availability would not be ready until after 1995.
- Secondary storage (HDD) image data load for U.S. patents will be complete in 1992, while foreign patents will be completed much later.
- Foreign patent image retrieval subsystem will be fully developed about 1994. Data base will be complete after 1995.
- Development of classification/reclassification support begins in 1992 and continues through 1995.
- Capture of missing patents begins in 1990, but is not completed until about 1993.

Trademark Automation

Funding in FY 1991 for Trademark Automation is provided as follows (dollars in thousands):

Budget Activity:	1991 Base	1991 Estimate	Increase (Decrease)
Trademark Process	$1,849	$3,330	$1,481

Major milestones in 1991 for Trademark Automation include:

- Modernization of the T-Search terminal component (hardware and software) to improve system performance.
- System performance enhancements supported by budget request.
- Modification to T-Search system to allow digitized image data to be written to magnetic tape in a standard format so that the images can be sold to the public.

Management and Administrative Systems

Funding in FY 1991 for Management and Administrative Systems is provided by the following budget activities (dollars in thousands):

Budget Activity:	1991 Base	1991 Estimate	Increase (Decrease)
Patent Process	$311	$0	($311)
Information Dissemination	0	342	342
Executive Direction and Administration	14,107	18,402	4,295
Total	$14,418	$18,744	$4,326

Major milestones for Management and Administrative Systems includes:

- Staff increases to provide a separate APS contracts staff, to maintain and secure PTO archives, to support systems analysis for the automated trademark systems, to support database integrity, and to increase administrative and management support.

Revised Automation Master Plan Summary
Actual FY 1989 Summary

The following section is included in response to a directive from the House Committee on Appropriations included in House of Representatives Report No. 98-226 which states:

> "The Committee directs the Patent and Trademark Office to include in each year's budget justification a comparison of the planned costs and benefits and the planned schedule...versus the actual costs, benefits and schedule."

I. Planned versus Actual Costs

The following tables compare plan versus actual obligations for FY 1989 in two ways: by budget activity and by the system categories.

FY 1989 Automation Obligations by Budget Activity
(dollar amounts in thousands)

	Patent Process	Trademark Process	Information Dissemination	Executive Direction and Administration	Total
Budget Plan	$24,977	$2,126	$11,598	$24,485	$63,186
Prior Year Funds	3,453	1,458	898	5,179	10,988
Total Available	28,430	3,584	12,496	29,664	74,174
Actual Obligations	27,786	2,509	12,310	26,503	69,108
Balance	$644	$1,075	$186	$3,161	$5,066

FY 1989 Automation Obligations by Major System Category
(dollar amounts in thousands)

	Automated Patent System	Trademark Automation	Management and Administrative Systems	Total
Budget Plan	$45,995	$2,126	$15,065	$63,186
Prior Year Funds	4,351	1,458	5,179	10,988
Total Available	50,346	3,584	20,244	74,174
Actual Obligations	49,069	2,509	17,530	69,108
Balance	$1,277	$1,075	$2,714	$5,066

Unobligated balances of $5,066,000 in FY 1989 were unavoidable and due primarily to delays in procurement processing.

The following provides more detail on obligations within the major system categories (dollars in thousands):

Automated Patent System: Obligations - $49,069
- The Automated Patent System (APS) prime contract for equipment, software and contractor services - $41,451.
- I.V.&V. activities related to the APS prime contract - $1,251.
- Technical support activities provided by contract - $3,888.
- Costs related to Industry Review Advisory Committee (IRAC) for APS - $7.
- Miscellaneous costs related to system management and support - $2,472.

Trademark Automation: Obligations - $2,509
- T-Search contract for lease and maintenance of equipment and software for T-Search System - $759.
- Trademark share of rental and maintenance of current systems for TRAM - $1,309.
- Trademark share of the Lot B peripheral equipment - $322.
- Other miscellaneous expenses - $119.

Management and Administrative Systems: Obligations - $17,530
- Compensation and benefits for Office of Information Systems staff - $9,580.
- Rental and maintenance for non-Trademark portion of current systems - $1,762.
- Supplies and miscellaneous equipment for current systems - $2,625.
- Support contracts for current systems - $1,539.
- Travel, shipping and printing - $113.
- Miscellaneous rentals, supplies and equipment - $141.
- Miscellaneous services and maintenance - $757.
- Miscellaneous general expenses - $1,013.

II. Actual Automation Cost Savings

A summary of costs savings realized in the PTO budget thru FY 1991 include:

Fiscal Year	Line Item	Description	Base Reduction
1986	Trademark Printing	In-house photocomposition	($731,000)
1987	Examination-Professional (Patent Process)	Meade data base reduction	($612,000)
1988	Examination of Trademarks	General savings from automation of Trademark Process	($68,000)

III. Schedule of Major Automation Events for FY 1989 through FY 1991

Automated Patent System (APS)-Includes Data Base Auto.	1990 Congressional Schedule	1991 Congressional Schedule	Comments:
Full Text Search			
Extend text search by completing installation of additional text terminals if needed	3rd Qtr/1989	3rd Qtr/1989	Completed
Expanded U.S. Patent text data base available	3rd Qtr/1989	4th Qtr/1990	Revised Schedule due to complications in data conversion and delays in acquiring data storage
Complete public search room capability	2nd Qtr/1990	3rd Qtr/1989	Initial Capability Completed
U.S. Patent Backfile Image Capture			
Complete capture of full backfile of U.S. Patent images	4th Qtr/1989	4th Qtr/1989	Initial Capability Completed
Classified Search and Image Retrieval			
Complete evaluation of the effectiveness of electronic searching of classified image files and the electronic searching of text and image files together and the effect of electronic searching on examiner performance and productivity.	1st Qtr/1989	1st Qtr/1989	Completed
Successful completion of stability test period	1st Qtr/1989	1st Qtr/1989	Completed

Automated Patent System (APS)-Includes Data Base Auto.	1990 Congressional Schedule	1991 Congressional Schedule	Comments:
Deployment decision for second testbed examining group	3rd Qtr/1989	4th Qtr/1989	Completed
Analysis of review panel recommendations completed	4th Qtr/1989	4th Qtr/1989	Completed
Ergonomic and performance enhancements installed and tested	4th Qtr/1989	3rd Qtr/1990	Revised Schedule due to protracted four-party negotiation for an acceptable workstation
Complete loading of 150 dpi image data base for second examining group	N/A	3rd Qtr/1990	New Milestone
Extend APS image search and retrieval to second examining group	N/A	3rd Qtr/1990	New Milestone
Begin load of complete U.S. file of patent images to high density storage devices	N/A	1st Qtr/1991	New Milestone
Office Automation			
Complete deployment of office automation capabilities to all PTO managers	4th Qtr/1989	N/A	Deferred per IRAC Recommendation

Trademark Automation (TRAM, T-Search)	1990 Congressional Schedule	1991 Congressional Schedule	Comments:
Text Editing - I			
Implement Text Editing - I capability	3rd Qtr/1989	2nd Qtr/1990	Revised Schedule due to delayed Lot B installation
Applicant and Registrant Index			
Complete implementation of index to allow applicant and registrant ownership information to be retrieved on-line	3rd Qtr/1990	N/A	Deferred Beyond FY 1991

Trademark Automation (TRAM, T-Search)	1990 Congressional Schedule	1991 Congressional Schedule	Comments:
Data Base Administration			
Implement capability of automated procedure to ensure that Trademark data meets high standards of accuracy and completeness	3rd Qtr/1989	2nd Qtr/1990	Revised Schedule due to higher priority of ITU implementation
Electronic Voice Box			
Implement electronic voice box capabilities	4th Qtr/1989	2nd Qtr/1990	Revised Schedule due to vocabulary changes
Assignment System			
Implement new assignments capability	1st Qtr/1990	4th Qtr/1991	Revised Schedule due to delay in documentation of user requirements
Intent-to-Use Legislation			
Implement revisions consistent with ITU legislation of 1988	1st Qtr/1990	1st Qtr/1990	Completed
Adversary Proceedings Index			
Implement new adversary proceedings index capability	3rd Qtr/1990	N/A	Deferred Beyond FY 1991
Trial and Appeal Board Administration			
Implement new TTAB administration capabilities	4th Qtr/1990	N/A	Deferred Beyond FY 1991
Develop functional requirements document for 2nd generation Automated Trademark Systems	N/A	4th Qtr/1990	New Milestone
Creation of text CD ROM file	N/A	1st Qtr/1991	New Milestone

Management and Administrative Systems (MAS)	1990 Congressional Schedule	1991 Congressional Schedule	Comments:
Current Network Equipment Replacement Award contract	3rd Qtr/1989	4th Qtr/1989	Completed
Install Equipment	4th Qtr/1989	2nd Qtr/1990	Revised Schedule due primarily in contract award delay

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Offsetting Fees

Offsetting Fee Collections:		1989 Actual Amount	1990 Currently Available Amount	1991 Base Amount	1991 Estimate Amount	Increase/ (Decrease) From 1991 Base Amount
Patent Process........................	Collections	$125,922	$116,057	$126,381	$155,551	$29,170
	Obligations	130,137	122,378			
Trademark Process.....................	Collections	20,726	16,679	16,915	22,028	5,113
	Obligations	22,913	30,025			
Information Dissemination.............	Collections	31,619	24,169	25,229	29,971	4,742
	Obligations	32,344	24,169			
Executive Direction and Administration.	Collections	14,289	23,327	24,996	34,070	9,074
	Obligations	11,844	23,327			
Total.................................	Collections	192,556	180,232	193,521	241,620	48,099
	Obligations	197,238	199,899			
Federal Reimbursements................	Reimbursements	- 234	- 200	- 200	- 200	0
	Obligations	- 234	- 200			
Financing from prior year fees........	Collections	...	+ 12,265			
	Obligations	- 26,869	- 22,187			
Amount Sequestered....................	Collections	...	- 2,520			
	Obligations	...	...			
Net Request...........................	Collections	192,322	189,777	193,321	241,420	48,099
	Obligations	170,135	177,512			

Department of Commerce
Pat ent and Trademark Office
Salaries and Expenses
JUSTIFICA TION OF PROGRAM AND PERFORMANCE
(O bligations in Thousands)

Activity: Offsetting Fee Collections

Goal:

To offset by user fee collections portions of the processing c sts of the Patent and Trademark Office in order to support the main Department subgoals and PTO objectives:

- Maintain patent pendency at 18 months and improve patent qua ity.
- Automate the patent and trademark processes.
- Maintain trademark pendency at three months to first action or all cases and thirteen months to disposal for use cases with timely disposal of all others and improve trademark quality.
- Strengthen worldwide protection of intellectual property.

Objective:

To utilize fee collections to maintain reduced patent pendency maintain trademark pendency and improve public services.

Base Program

The Patent and Trademark Office charges fees for processing patents and trademarks and for providing services related to the processing of patents and trademarks in accordance with the provisions of Public Law 96-517, Public Law 97-247, Public Law 99-607, and Public Law 100-703. The principal features of these Acts are:

1. Establishment of statutory fees for patents (Section 41(a) and Section 41(b) of title 35, United States Code), and authorization to adjust these fees every three years to reflect fluctuations in the Consumer Price Index (CPI) during the previous three year period.
2. Establishment of trademark fees by the Commissioner under Section 31 of the Trademark Act of 1946 (15 U.S.C. 1113), and authorization to adjust these fees in the aggregate every three years to reflect fluctuations in the Consumer Price Index (CPI) during the previous three year period.
3. Establishment of service fees by the Commissioner under Section 41(d) of title 35, United States Code, and authorization to adjust these fees in the aggregate every three years to reflect fluctuations in the Consumer Price Index (CPI) during the previous three year period.
4. Reduction by 50 percent of the patent processing fees (Section 41(a) and 41(b)) charged to independent inventors, small businesses, and nonprofit organizations (e.g., universities).
5. Prohibition against using trademark fee revenues other than for the processing of trademark registrations and for other services and materials related to trademarks (Section 42(c) of title 35, United States Code).
6. Restriction of the amount of fees used to finance automatic data processing activities to 30%, (i.e, 70% of the costs of automation must come from appropriated funds).
7. Prohibition against using fee revenues to finance the costs of public patent and trademark search rooms and libraries.
8. Authorization to establish fees for automated patent and trademark search systems.
9. Authorization to use appropriated or apportioned fee revenues for any PTO operations or activities, except for the prohibitions and restrictions mentioned above.
10. Along with the submission of the annual PTO budget, the Secretary of Commerce shall provide to the Committees on the Judiciary:
    (a) a list of patent and trademark fee collections received during the previous fiscal year;
    (b) a list of PTO activities during the preceding fiscal year which were supported by fee expenditures and by appropriations;
    (c) budget plans for significant PTO programs, projects and activities including outyear estimates;
    (d) any proposed disposition of surplus fees by the PTO; and
    (e) any other information considered necessary by the Committees.

Patent and trademark fee collections are distributed to PTO budget line items. It should be noted that this distribution does not represent fees "collected" by the line item. Specific fees generally cannot be credited to a particular line item since many line items contribute effort necessary to accomplish the task for which the fee is paid. Therefore, no cost center or budget line item has an irrevocable claim to a particular fee. Fees are distributed to PTO budget line items primarily for budget presentation purposes. Fees are collected by function as shown on the following page.

Since the fee legislation (Section 42(c) of title 35, United States Code), restricts the use of trademark fees to the financing of trademark costs, the PTO must maintain separate accounts for patent and trademark fee collections. Patent and trademark fee collections for 1989 through 1991 are shown in the following table:

Summary of Workload and Performance
(Dollar amounts in thousands)

	1989 Actual Amount	1990 Currently Available Amount	1991 Base Amount	1991 Estimate Amount	Increase/ (Decrease) Amount
Patent Fee Collections:					
Current Year Patent Fee Collections..........	$165,557	$157,343	$170,148	$213,859	$43,711
Less: Sequestered Patent Fees...............	0	(2,202)	0	0	0
Current Year Patent Fees Available...........	165,557	155,141	170,148	213,859	43,711
Unobligated Patent Fees from Prior Year......	9,502	8,608	0	0	0
Additional Patent Fees Applied by Congress...	0	3,657	0	0	0
Total Patent Fees Available for Obligation...	175,059	167,406	170,148	213,859	43,711
Patent Fees Obligated........................	166,451	167,406	170,148	213,859	43,711
Unobligated Patent Fees Carried Forward......	8,608	0	0	0	0
Trademark Fee Collections:					
Current Year Trademark Fee Collections.......	$25,462	$22,689	$23,373	$27,761	$4,388
Less: Sequestered Trademark Fees............	0	(318)	0	0	0
Current Year Trademark Fees Available...........	25,462	22,371	23,373	27,761	4,388
Unobligated Trademark Fees from Prior Year...	14,949	13,579	0	0	0
Total Trademark Fees Available for Obligation	40,411	35,950	23,373	27,761	4,388
Trademark Fees Obligated.....................	26,832	35,950	23,373	27,761	4,388
Unobligated Trademark Fees Carried Forward...	13,579	0	0	0	0

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
INCREASES FOR FY 1991
(Obligations in Thousands)

	1991 Base	1991 Estimate	Increase (Decrease)
Offsetting Fee Collections....................	$193,521	$241,620	$48,099

The offsetting fee estimates shown in this request reflect the portion of PTO program costs required to be funded by fee collections. Fees were revised on April 17, 1989 for the fiscal year 1989 - 1991 fee cycle. The 1991 estimate assumes the following:

1. Patent fees (Section 41(a) and Section 41(b)) were adjusted by a factor of 10.3 percent, equal to the change in the Consumer Price Index for the prior three year (1986-1988) period. Workloads have been adjusted to: (1) reflect the receipt of growing numbers of patent applications; (2) patent issues projected in the 1991 patent production model; (3) patent maintenance fees as reflected by current renewal rates, and (4) attendant fees as growing in proportion to patent applications and issues.

2. Patent service fees authorized under Section 41(d) were adjusted in the aggregate by a factor of 10.3 percent, equal to the change in the CPI for the prior three year (1986-1988) period.

3. Patent Cooperation Treaty (PCT) fees authorized under Section 376 of title 35, United States Code were adjusted by an amount to recover the costs of the program. Workloads have been increased consistent with projected PCT applications.

4. Trademark fees were reduced in two areas. The trademark application filing fee was reduced from $200 to $175, and the trademark assignment fee was reduced from $100 to $8. The 1991 estimate includes new fees to implement the intent-to-use provisions of the Trademark Law Revision Act of 1988.

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
	Personnel Compensation			
11.1	Full-Time Permanent Compensation	136,168	150,945	14,777
11.3	Other Than Full-Time Permanent Compensation	3,314	3,621	307
11.5	Other Personnel Compensation	7,668	13,592	5,924
	Total Personnel Compensation	147,150	168,158	21,008
12	Personnel Benefits	25,425	29,354	3,929
21	Travel and Transportation of Persons	533	555	22
22	Transportation of Things	329	331	2
23.1	Rental Payments to GSA	23,477	29,498	6,021
23.2	Rental Payments to Others	69	69	0
23.3	Communications, Utilities, and Other Rent	8,196	9,765	1,569
24	Printing and Reproduction	24,053	29,308	5,255
25	Other Services	53,581	75,329	21,748
26	Supplies and Materials	3,324	5,192	1,868
31	Equipment	2,573	5,888	3,315
32	Lands and Structures	0	0	0
33	Investments and Loans	0	0	0
41	Grants, Subsidies and Contributions	0	0	0
42	Insurance Claims and Indemnities	0	0	0
43	Interest and Dividends	0	0	0
44	Refunds	0	0	0
	Subtotal, Direct Obligations	288,710	353,447	64,737
	Reimbursable Obligations	200	200	0
	Total Obligations	288,910	353,647	64,737
	Offsetting Fees	193,521	241,620	48,099
	Appropriation Requested	95,389	112,027	16,638

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	1991 Base	1991 Estimate	Increase (Decrease)
Full-Time Equivalent Employment:			
Full-Time Permanent	3,621	4,297	676
Other Than Full-Time Permanent	123	144	21
Total Full-Time Equivalent Employment:	3,744	4,441	697
Authorized Positions:			
Full-Time Permanent	3,922	4,765	843
Other Than Full-Time Permanent	231	252	21
Total Authorized Positions	4,153	5,017	864

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
11.1	Permanent Positions:			
	Executive Level	91	91	0
	Senior Executive Service	2,850	3,026	176
	General Schedule	128,338	142,721	14,383
	Wage Board	418	418	0
	Scientific and Professional (P.L. 80-313)	75	189	114
	Patent Appeals Examiners (P.L. 82-593)	3,788	3,892	104
	Trademark Appeals Examiners (P.L. 98-622)	608	608	0
	Total, Permanent Positions	136,168	150,945	14,777
11.3	Positions Other Than Full-Time Permanent:			
	General Schedule	3,184	3,491	307
	Wage Board	23	23	0
	Experts and Consultants	25	25	0
	Hourly	82	82	0
	Total, Positions Other Than Permanent	3,314	3,621	307
11.5	Other Personnel Compensation:			
	Overtime	7,055	7,948	893
	SES Performance Awards	70	143	73
	Cash Awards	416	5,100	4,684
	Merit Pay Awards	66	68	2
	Other	61	333	272
	Total, Other Personnel Compensation	7,668	13,592	5,924

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
12.1	Personnel Benefits:			
	Civil Service Retirement	5,612	5,612	0
	Federal Employee Retirement System (FERS)	7,166	9,089	1,923
	Thrift Plan Contributions	1,099	1,394	295
	Federal Insurance Contributions (FICA)	3,468	4,402	934
	Medicare	1,921	2,144	223
	Health Insurance	5,207	5,717	510
	Life Insurance	421	465	44
	Employees Compensation Fund	531	531	0
	Total, Personnel Benefits	25,425	29,354	3,929
21.0	Travel and Transportation of Persons:			
	Common Carrier	212	224	12
	Mileage	2	2	0
	Per Diem	275	285	10
	Privately-Owned Automobiles	5	5	0
	GSA Vehicles	39	39	0
	Total, Travel & Transportation of Persons	533	555	22
22.0	Transportation of Things:			
	Parcel Post	253	255	2
	Other	76	76	0
	Total, Transportation of Things	329	331	2

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
23.1	Rental Payments to GSA	23,477	29,498	6,021
23.2	Rental Payments to Others	69	69	0
23.3	Communications, Utilities, and Other Rent:			
	Rental of ADP Equipment	2,293	2,433	140
	Rental of Office Copying Equipment	627	627	0
	Other Equipment Rental	321	321	0
	Federal Telecommunications Systems	719	944	225
	Other Telecommunications Systems	2,105	2,611	506
	Postal Services by USPS	1,453	2,063	610
	Utilities Services	678	766	88
	Total, Comm, Utilities, and Other Rent	8,196	9,765	1,569
24.0	Printing and Reproduction:			
	Patent Printing	21,281	25,922	4,641
	Trademark Printing	879	1,005	126
	Administrative Printing	864	1,304	440
	Publications	106	106	0
	Envelopes	57	57	0
	Internal Use Forms	647	689	42
	Binding Operations	30	36	6
	Briefs	18	18	0
	Working Capital Fund	171	171	0
	Total, Printing and Reproduction	24,053	29,308	5,255

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
25.0	Other Services:			
	University Training	592	592	0
	Office of Personnel Management Training	155	442	287
	Other Training	352	976	624
	Maintenance of Equipment	1,110	2,383	1,273
	GSA Alterations and Repairs	986	1,000	14
	Guard Services	338	338	0
	ADP Services	2,747	3,403	656
	Telecommunications Services	1,650	1,650	0
	Working Capital Fund	2,576	3,323	747
	Other Commerce Agencies	252	252	0
	Other Contracts	42,823	60,970	18,147
	Total, Other Services	53,581	75,329	21,748
26.0	Supplies and Materials:			
	Office Supplies	690	1,000	310
	ADP Supplies	542	890	348
	Paper for Office Copying Equipment	332	430	98
	Books and Periodicals	569	697	128
	Non-Capitalized Furniture & Equipment	579	1,369	790
	Other	612	806	194
	Total, Supplies and Materials	3,324	5,192	1,868

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	Object Class Title	1991 Base	1991 Estimate	Increase (Decrease)
31.0	**Equipment:**			
	Office Machines and Equipment	789	1,456	667
	ADP Hardware	1,061	3,156	2,095
	ADP Software	115	374	259
	Furniture	201	484	283
	Other	407	418	11
	Total, Equipment	2,573	5,888	3,315
	Subtotal, Direct Obligations	288,710	353,447	64,737
	Reimbursable Obligations	200	200	0
	Total Obligations	288,910	353,647	64,737

Exhibit 17

Patent and Trademark Office
Salaries and Expenses
ACTIVITY/SUBACTIVTY CHANGE CROSSWALK
Part I - 1990 Structure
(Dollar amounts in thousands)

Activity/ Subactivity	1991 Direct Obligations	Proposed Changes
Patent Process	228,830	
Examination-professional	158,540	Transfer $14,019 to EXAD "Space management and acquisition"
Examination-Clerical	37,002	Transfer $3,801 to EXAD "Space management and acquisition"
Appeals and Interferences	7,370	Transfer $513 to EXAD "Space management and acquisition"
Patent Printing	25,918	No change
Trademark Process	23,975	
Examination of trademarks	20,683	Transfer $1,775 to EXAD "Space management and acquisition"
Trial and Appeal Board	2,287	Transfer $172 to EXAD "Space management and acquisition"
Trademark printing	1,005	No change
Information Dissemination	56,107	
Customer services	14,444	Transfer $3,883 to EXAD "Space management and acquisition"
Publication services	5,412	Transfer $511 to EXAD "Space management and acquisition"
Data and document retrieval systems	36,251	Transfer $1,948 to EXAD "Space management and acquisition"
Executive Direction and Administration (EXAD)	44,735	
Commissioner	661	Transfer $67 to EXAD "Space management and acquisition"
Solictor	1,925	Transfer $155 to EXAD "Space management and acquisition"
Legislation and international affairs	1,943	Transfer $157 to EXAD "Space management and acquisition"
Management planning	7,260	Transfer $350 to EXAD "Space management and acquisition"
Administrative Services	3,558	Transfer $200 to EXAD "Space management and acquisition"
Automation	27,977	Transfer $1,851 to EXAD "Space management and acquisition"
Quality review	1,411	Transfer $96 to EXAD "Space management and acquisition"
Total requirements	353,647	

Exhibit 18

Patent and Trademark Office
Salaries and Expenses
ACTIVITY/SUBACTIVTY CHANGE CROSSWALK
Part 2 - 1991 Structure
(Dollar amounts in thousands)

Activity/ Subactivity	1987	1988	1989	1990	1991
Patent Process	147,499	173,191	186,930	155,378	210,497
Examination-professional	107068	128659	132375	106,527	144,521
Examination-Clerical	16623	18793	22358	22,648	33,201
Appeals and Interferences	5284	6063	6249	5,903	6,857
Patent Printing	18524	19676	25948	20,300	25,918
Trademark Process	17,867	19,619	34,537	30,025	22,028
Examination of trademarks	15791	17284	31,501	27,445	18,908
Trial and Appeal Board	1386	1600	2,026	1,743	2,115
Trademark printing	690	735	1,010	837	1,005
Information Dissemination	36,898	41,494	49,303	45,385	49,765
Customer services	8464	9192	11,988	8,738	10,561
Publication services	3665	4194	4,336	4,161	4,901
Data and document retrieval systems	24769	28108	32,979	32,486	34,303
Executive Direction and Administration (EXAD)	42,405	54,013	65,000	61,361	71,357
Commissioner	494	531	683	551	594
Solicitor	1596	1836	1,843	1,612	1,770
Legislation and international affairs	1110	1106	1,535	1,673	1,786
Management planning	4273	4682	6,498	6,011	6,910
Administrative Services	2327	2656	3,682	2,931	3,358
Automation	14372	21718	28,536	24,735	26,126
Quality review	1055	1240	1,177	1,169	1,315
Space Management and Acquisition	17178	20244	21,046	22,679	29,498
Total Obligations	244,669	288,317	335,770	292,149	353,647

Department of Commerce
Patent and Trademark Office
Salaries and Expenses
BRIDGE TO 1990 REVISED PRESIDENT'S BUDGET
(Dollar amounts in thousands)

Appropriation: Salaries and Expenses

Activity/Subactivity:		1990 President's Budget Personnel	1990 President's Budget Amount	Changes Personnel	Changes Amount		1990 Revised President's Budget Personnel	1990 Revised President's Budget Amount
Patent Process:								
Examination-professional	Pos.	1,745	$109,020	(4)	($336)	1/	1,741	$108,684
	FTE	1,564		(4)			1,560	
Examination-clerical	Pos.	749	20,852	34	1,592	1,2/	783	22,444
	FTE	712		34			746	
Appeals and Interferences	Pos.	100	5,850	0	0		100	5,850
	FTE	92		0			92	
Patent printing	Pos.	0	20,117	0	0		0	20,117
	FTE	0		0			0	
Subtotal	Pos.	2,594	155,839	30	1,256		2,624	157,095
	FTE	2,368		30			2,398	
Trademark Process:								
Examination of trademarks	Pos.	278	13,902	0	0		278	13,902
	FTE	264		0			264	
Trial and Appeal Board	Pos.	36	1,719	0	0		36	1,719
	FTE	37		0			37	
Trademark printing	Pos.	0	825	0	0		0	825
	FTE	0		0			0	
Subtotal	Pos.	314	16,446	0	0		314	16,446
	FTE	301		0			301	
Information Dissemination:								
Customer services	Pos.	99	9,726	(30)	(1,256)	2/	69	8,470
	FTE	136		(30)			106	
Publication services	Pos.	121	4,031	0	0		121	4,031
	FTE	112		0			112	
Data and document retrieval system	Pos.	295	31,199	0	0		295	31,199
	FTE	288		0			288	
Subtotal	Pos.	515	44,956	(30)	(1,256)		485	43,700
	FTE	536		(30)			506	

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Department of Commerce
Patent and Trademark Office
Salaries and Expenses
BRIDGE TO 1990 REVISED PRESIDENT'S BUDGET
(Dollar amounts in thousands)

Appropriation: Salaries and Expenses

Activity/Subactivity:		1990 President's Budget		Changes		1990 Revised President's Budget	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction and Administration:							
Commissioner	Pos.	12	692	(3)	(186) 3/	9	506
	FTE	10		-3		7	
Solicitor	Pos.	25	1,493	0	0	25	1,493
	FTE	23		0		23	
Legislation and international affairs	Pos.	29	1,537	0	0	29	1,537
	FTE	25		0		25	
Management planning	Pos.	116	5,380	3	186 3/	119	5,566
	FTE	119		3		122	
Administrative services	Pos.	54	2,692	0	0	54	2,692
	FTE	76		0		76	
Automation	Pos.	223	23,238	0	0	223	23,238
	FTE	221		0		221	
Quality review	Pos.	16	1,125	0	0	16	1,125
	FTE	15		0		15	
Space Acquisition and Management	Pos.	0	22479	0	0	0	22,479
	FTE	0		0		0	
Subtotal	Pos.	475	58,636	0	0	475	58,636
	FTE	489		0		489	
Total requirements	Pos.	3,898	275,877	0	0	3,898	275,877
	FTE	3,694		0		3,694	

1/ Consolidation of Patent Cooperation Treaty functions.
2/ Transfer of application microfilming to pre-examination.
3/ Transfer of Project XL to management planning

Patent and Trademark Office

Salaries and Expenses

	Average Grades and Salaries		
	1989	1990	1991
Average ES salary..	$76,267	$79,506	$79,481
Average GS grade...	9.30	9.28	9.45
Average GS salary..	$34,354	$36,624	$33,914

Patent and Trademark Office
Salaries and Expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting Services	...	$10	$10
Management and professional services	$43	30	30
Special studies and analyses	...	15	15
Management and support services for research and development	...	...	...
Total	$43	$55	$55

No consulting services were acquired by the Patent and Trademark Office during FY 1989.

Management and professional services were acquired during FY 1989 from:

- Professional arbitrators for employee union hearings ($36,000)
- Independent contractors (court reporters) provided professional services. ($16,500)

Funding for consulting and related services in 1990 and 1991 will provide support to the PTO in its efforts to reduce pendency times, to improve the quality of its products and services, to automate office processes, and to protect and promote U.S. intellectual property rights abroad.

Mr. Early. Here to testify is the Acting Assistant Commissioner for Patents and Trademarks, Jeffrey Samuels. Since this is your first appearance before the subcommittee, we will insert your biographic sketch into the record at this point, and then you may proceed with your statement however you want.

[The biography of Mr. Samuels follows:]

Biography of Jeffrey M. Samuels, Assistant Commissioner for Trademarks, Patent and Trademark Office

Jeffrey M. Samuels became Assistant Commissioner for Trademarks on November 9, 1987. He is responsible for the administration of the trademark programs in the U.S. Patent and Trademark Office.

Mr. Samuels was employed from 1976 to 1987 by The Bureau of National Affairs, Inc., a Washington, D.C.-based publisher of information services. From 1976 to May 1982, Mr. Samuels was a legal editor on the staff of "BNA's Patent, Trademark & Copyright Journal." From May 1982 to November 1987, Mr. Samuels served as managing editor of the publication. While at BNA, Mr. Samuels also organized and moderated a number of conferences in the intellectual property law field. He has authored several articles relating to intellectual property law developments and served as editor of the publication "Patent, Trademark and Copyright Laws." Before leaving BNA, Mr. Samuels helped launch a new publication covering worldwide developments in the intellectual property field.

Mr. Samuels graduated from Colgate University (B.A. 1972) and Albany Law School (J.D. 1975). He is a member of the New York, Virginia, and District of Columbia bars. He is also a member of the American Bar Association's Section of Patent, Trademark and Copyright Law, the American Intellectual Property Law Association, and the District of Columbia Bar Association's Section on Patent, Trademark and Copyright Law and the Section on Computer Law.

Mr. Samuels is married to the former Linda Bartman and has two children, Joanna and Eric. He resides in Fairfax, Virginia.

Mr. Samuels. Thank you, Mr. Chairman.

I appreciate the opportunity to present the President's request for appropriations for the Patent and Trademark Office for fiscal year 1991. With me is the PTO's Assistant Commissioner for Finance and Planning, Brad Huther.

The PTO's fundamental mission is to administer the laws relating to patents and trademarks in order to promote industrial and technological progress in the United States and strengthen the national economy. This mission is accomplished by examining patent and trademark applications, issuing patents and registering trademarks, disseminating patent and trademark information to the public and encouraging a domestic and international climate in which intellectual property can flourish.

We intend to fulfill our mission through the following four point program; to maintain the average time it takes to get a patent at 18 months; to maintain the "3/13" trademark pendency goal for a "use-based application," and to achieve timely disposal of applications filed under the "intent-to-use" provisions of the Trademark Law Revision Act of 1988; third, to automate the operations of the Patent and Trademark Office by the 1990s, and fourth, to strengthen the worldwide protection of intellectual property.

These program goals are supported by the Patent and Trademark Office's fiscal year 1991 request of $353,647,000, and 4,765 positions, an increase of $77,770,000 and 867 positions above the fiscal year 1990 program level. Because offsetting collections are projected to total $241,620,000, our budget authority request of $112,027,000 represents less than 32 percent of our operating costs.

This committee is aware that the PTO has been responding to the public's need for better services. As we prepare to celebrate later this year the bicentennial of the signing of the first patent law, the 1980s will be remembered as a period of significant improvements in the quality and timeliness of issued patents and trademarks.

During the past decade, we achieved major reductions in patent and trademark processing time. We launched an ambitious but critically important automation program and we strengthened intellectual property protection worldwide. To achieve these objectives, we relied on an effective short term planning process using the annual budget review as the driving factor. That process has served us well, but we now are facing unprecedented challenges in the 1990s.

Application filings are already at an all-time high and growing. Complex demographic changes are occurring in our society that will profoundly affect our ability to attract and retain new employees. Automation is expected to cause far-reaching changes in the PTO's operating environment, some of which are already taking place in the trademark operation.

Accordingly our planning process is being refocused in order to link short term operational priorities with our long range strategic directions, while at the same time holding costs down. We continue to see dramatic growth in the number of patent applications being filed in the Office. Last year, we had predicted application filings for fiscal year 1990 and 1991 to reach 140,000 and 144,000, respectively, but we now expect those levels will be surpassed by about 19 percent for a two year total of 55,000 additional cases above plan.

Because every group of 13,000 cases roughly translates into a one month pendency burden, this added work load is especially significant. These trends indicate that by the mid-1990s, patent application filings will approach 250,000, which is roughly two-and-one-half times the filing rate of the early 1980s.

In order to address this phenomenal increase in workload, we plan to continue our aggressive recruitment efforts, but we also are seeking new and innovative strategies to increase production capacity, such as instituting a productivity gain sharing program and taking steps to ensure longer retention of qualified employees.

We believe we must find ways of reducing learning curves and eliminating labor intensive operations wherever possible. We are committed to balancing this effort with aggressive steps to improve patent quality. Specifically, we have implemented a Quality Reinforcement Program throughout our patent examining operation. This program has improved the overall completeness of the patented files, so that patents issued, if challenged in court, are more likely to be found valid.

In the critically important biotechnology discipline, we have worked hard to build a cadre of well-qualified examiners, and to supply them with personal computers, access to commercial databases and other tools to search and examine this rapidly expanding field of technology.

Turning to trademarks, since 1985, we have successfully maintained the trademark pendency goal of three months to first action and 13 months to registration. Our goal for the 1990s is to maintain the "3/13" pendency goal for all filings under standard use provisions with timely disposal of all applications filed under the "intent-to-use" provisions of the Trademark Law and Revision Act of 1988, which was implemented this past November.

This legislation is expected to increase trademark application filings to a level of 135,000 by 1995, a rate of increase equally as dramatic as patents. Our strategy in trademarks is to continue hiring staff to accommodate the increased workload while implementing new initiatives to enhance the quality of trademark registrations.

For example, we are developing new requirements which are designed to make our automated trademark systems more efficient and responsive, and we have implemented a new Office of Trademark Quality Review. Last year, Mr. Chairman, we had informed you that we had successfully implemented a number of substantive recommendations given to us by an Industry Review Panel on the Automated Patent System (APS).

As a result of the panel's recommendations and the recommendations of its successor, the Industry Review Advisory Committee, the PTO has adopted an evolutionary approach to system development, and we are now ready to begin the gradual deployment of APS to a second patent examining group.

APS full-text searching is fully operational in all 16 patent examining groups and in our public search room. We are exploring ways to enhance the public's use of other features of APS, and are considering other alternatives to disseminate our information more conveniently via the use of CD-ROM technology.

Mr. Early. What is that CD-ROM?

Mr. Samuels. It is disks, optical disks, that information is put upon, and we have been sending information in that form to our patent depository libraries now for several years.

The Automated Trademark System continues to be an effective tool in increasing the quality of the decisions rendered by our trademark examining attorneys. This system has also been offered to the public at our facilities in Arlington, Virginia. We look forward to sending the fourth edition of our Automation Master Plan to the Committee later this Spring.

Effective intellectual property protection is an increasingly important factor for U.S. businesses competing in the world market. Multilaterally, the PTO is assisting the U.S. Trade Representative (USTR) in advocating the establishment of minimum standards of protection and enforcement of intellectual property rights within the framework of the General Agreement on Tariffs and Trade.

We are working with U.S. industry in the World Intellectual Property Organization to achieve an acceptable harmonization of patent laws. Bilaterally, we are emphasizing negotiations to strengthen intellectual property laws in developing countries, and more recently the countries of Eastern Europe. We are continuing training and assistance programs in the United States and abroad for nationals from developing countries including China, Korea, Taiwan, Saudi Arabia and Tanzania.

Also, the office will continue to work with the U.S. Trade Representative in implementation of the "special 301" provisions of the 1988 amendments to the Trade Act. The budget request for fiscal year 1991 reflects the administration's continued commitment to achieve our major goals: A net increase of 590 permanent positions and $29,219,000 is requested to maintain the 18 month average patent pendency period and to enhance patent quality. Provision of office automation capabilities is proposed for the Patent Examining Corps for $1,939,000, to be offset by savings related to the elimination of clerical typing positions. An increase of 95 permanent positions and $5,428,000 is requested to address the higher workload and information dissemination activities, as well as to improve patent search file integrity and examiner search services. Enhanced services supportive of patent examination require an increase of 14 permanent positions and $7,209,000 to address higher levels of applicant requests to practice before the PTO; to enhance personnel services to keep pace with increasing staff; to provide procurement services; to maintain the Patent Quality Review program, and to pay for our additional space requirements for the expanding work force.

An increase of 126 positions and $3,632,000 is requested to address higher trademark workloads to maintain the reduced pendency goals and improve trademark quality. These enhancements are totally supported by trademark user fees.

An increase of $17,310,000 and 18 permanent positions is requested for our automation programs, of which $11,503,000 is for the next phase of development and deployment of the Automated Patent System.

As a final note, Mr. Chairman, fiscal year 1991 marks the end of the PTO's current three year authorization cycle, during which we will have collected approximately $614,000,000 in user fees. Given that the increased costs of processing the additional patent workload in fiscal year 1990 and 1991 must be paid for from both current and projected revenues, the bottom line is that we expect to have little, if any, flexibility in our non-trademark fee accounts during the next two years. Mr. Chairman, this concludes my statement. I will be pleased to respond to any questions you may have.

[The statement of Mr. Samuels follows:]

STATEMENT BY
ACTING COMMISSIONER OF PATENTS AND TRADEMARKS
JEFFREY M. SAMUELS
SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
FEBRUARY 28, 1990

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to present the President's request for appropriations for the Patent and Trademark Office (PTO) for fiscal year 1991. With me is the PTO's Assistant Commissioner for Finance and Planning, Brad Huther.

FY 1991 REQUEST LEVEL

The PTO's fundamental mission is to administer the laws relating to patents and trademarks in order to promote industrial and technological progress in the U.S. and strengthen the national economy. This mission is accomplished by:

(1) examining patent and trademark applications, issuing patents and registering trademarks;

(2) disseminating patent and trademark information to the public; and

(3) encouraging a domestic and international climate in which intellectual property can flourish.

We intend to fulfill our mission through the following four-point program:

(1) to maintain the average time it takes to get a patent at 18 months;

(2) to maintain the "3/13" trademark pendency goal and to achieve timely disposal of applications filed under the intent-to-use provisions of the Trademark Law Revision Act of 1988;

(3) to automate the operations of the Patent and Trademark Office by the 1990's, and

(4) to strengthen the worldwide protection of intellectual property.

These program goals are supported in the Patent and Trademark Office's FY 1991 request of $353,647,000 and 4,765 positions, an increase of $77,770,000 and 867 positions above the FY 1990 program level. Because offsetting collections are projected to total $241,620,000, our budget authority request of $112,027,000 represents less than 32 percent of our operating costs.

PLANNING FACTORS

This Committee is aware that the PTO has been responding to the public's need for better services. As we prepare to celebrate later this year the bicentennial of the signing of the first patent law, the 1980's will be remembered as a period of significant improvements in the quality and timeliness of issued patents and trademarks. During the past decade we achieved major reductions in patent and trademark processing time, we launched an ambitious but critically important automation program and we strengthened intellectual property protection worldwide.

To achieve these objectives, we relied on an effective short-term planning process using the annual budget review as the driving factor. That process has served us well, but we now are facing unprecedented challenges in the 1990's: application filings are already at an all-time high and growing; complex demographic changes are occurring in our society that will profoundly affect our ability to attract and retain new employees; and automation is expected to cause far-reaching changes in the PTO's operating environment, some of which are already taking place in the trademark operation. Accordingly, our planning process is being refocused in order to link short-term operational priorities with our long-range strategic directions, while at the same time holding costs down.

We continue to see dramatic growth in the number of patent applications being filed with the Office. Last year, we had predicted application filings for FY 1990 and FY 1991 to reach 140,000 and 144,000, respectively, but we now expect those levels will be surpassed by about 19 percent, for a two-year total of 55,000 additional cases above plan. Because every group of 13,000 cases roughly translates into a one-month pendency burden, this added workload is especially significant. These trends indicate that by the mid-1990's patent application filings will approach 250,000, which is roughly two and one half times the filing rate of the early 1980's.

In order to address this phenomenal increase in workload, we plan to continue our aggressive recruitment efforts, but we also are seeking new and innovative strategies to increase production capacity, such as instituting a productivity gainsharing program and taking steps to ensure longer retention of qualified employees. We believe we must find ways of reducing learning curves and eliminating labor-intensive operations wherever possible. We are committed to balancing this effort with aggressive steps to improve patent quality. Specifically, we have implemented a Quality Reinforcement Program throughout our patent examining operation. This program has improved the overall completeness of the patented files so that the patents issued, if challenged in court, are more likely to be found valid. In the critically important biotechnology discipline, we have worked hard to build a cadre of well-qualified examiners and to supply them with personal computers, access to commercial data bases and other tools to search and examine this rapidly expanding field of technology.

Turning to trademarks, since 1985 we have successfully maintained the trademark pendency goal of three months to first action and 13 months to registration. Our goal for the 1990's is to maintain the "3/13" pendency goal for all filings under standard "use" provisions with timely disposal of all applications filed under the "intent-to-use" provisions of the Trademark Law Revision Act of 1988, which was implemented this past November. This legislation is expected to increase trademark application filings to a level of 135,000 by 1995--a rate of increase equally as dramatic as patents. Our strategy in trademarks is to continue hiring staff to accommodate the increased workload while implementing new initiatives to enhance the quality of trademark registrations. For example, we are developing new requirements which are designed to make our automated trademark systems more efficient and responsive, and we have implemented a new office of Trademark Quality Review.

Last year we informed you that we had successfully implemented a number of substantive recommendations given to us by an Industry Review Panel on the Automated Patent System (APS). As a result of the Panel's recommendations and the recommendations of its successor, the Industry Review Advisory Committee, the PTO has adopted an evolutionary approach and we are now ready to begin the gradual deployment of APS to a second patent examining group. APS Full Text Searching is fully operational in all 16 patent examining groups and in our Public Search Room. We are exploring ways to enhance the public's use of other features of APS and are considering other alternatives to disseminate our information more conveniently via the use of CD-ROM technology. The Automated Trademark System continues to be an effective tool in increasing the quality of the decisions rendered by our Trademark Examining Attorneys. This system has also been offered to the public at our facilities in Arlington, Virginia. We look forward to sending the fourth edition of our Automation Master Plan to the Committee later this Spring.

Effective intellectual property protection is an increasingly important factor for U.S. businesses competing in the world market. Multilaterally, the PTO is assisting the U.S. Trade Representative (USTR) in advocating the establishment of standards for protection and enforcement of intellectual property rights within the framework of the General Agreement on Tariffs and Trade (GATT). We are working with U.S. industry in the World Intellectual Property Organization to achieve an acceptable harmonization of patent laws. Bilaterally, we are emphasizing negotiations to strengthen intellectual property laws in developing countries and more recently, the countries of Eastern Europe. We are continuing training and assistance programs in the U.S. and abroad for nationals from developing countries including China, Korea, Taiwan, Saudi Arabia, and Tanzania. Also, the Office will continue to work with the U.S. Trade Representative in implementation of the "special 301" provisions of the 1988 amendments to the Trade Act.

FY 1991 SPECIFIC REQUESTS

The budget request for FY 1991 reflects the Administration's continued commitment to achieve our major goals:

- A net increase of 590 permanent positions and $29,219,000 is requested to maintain the 18 month average patent pendency period and to enhance patent quality. Provision of office automation capabilities is proposed for the Patent Examining Corps for $1,939,000, to be offset by savings related to the elimination of clerical typing positions. An increase of 95 permanent positions and $5,428,000 is requested to address the higher workload in information dissemination activities, as well as to improve patent search file integrity and examiner search services. Enhanced services supportive of patent examination require an increase of 14 permanent positions and $7,209,000 to address higher levels of applicant requests to practice before the PTO; to enhance personnel services to keep pace with increasing staff; to provide procurement services; to maintain the patent quality review program, and to pay for our additional space requirements for the expanding workforce.

- An increase of 126 positions and $3,632,000 is requested to address higher trademark workloads, to maintain the reduced pendency goals and improve trademark quality. These enhancements are totally supported by trademark user fees.

- An increase of $17,310,000 and 18 permanent positions is requested for our automation programs, of which $11,503,000 is for the next phase of development and deployment of the Automated Patent System.

As a final note, FY 1991 marks the end of the PTO's current three-year authorization cycle during which we will have collected approximately $614,000,000 in user fees. Given that the increased costs of processing the additional patent workload in FY 1990 and FY 1991 must be paid for from current and projected revenues, the bottom line is that we expect to have little if any flexibility in our non-trademark fee accounts during the next two years.

Mr. Chairman this concludes my statement. I will be pleased to respond to any questions you may have.

STATUS OF COMMISSIONER

Mr. **Early**. What is the status of—you are acting?

Mr. **Samuels**. I am the Acting Commissioner of Patents and Trademarks at this time.

Mr. **Early**. And has the President selected a——

Mr. **Samuels**. Yes, he has. The President, in October, announced his intention to nominate Harry Manbeck to be the next commissioner. Just yesterday, Mr. Chairman, the confirmation hearings for Mr. Manbeck's appointment were held, and it is anticipated that he would be confirmed and in place sometime next month.

Mr. **Early**. Fine. Is he a career man?

Mr. **Samuels**. No. He has spent his entire career with the General Electric Company. He has been their General Patent Counsel for about the last 20 years.

FLEXIBILITY IN PTO OPERATIONS

Mr. **Early**. Mr. Samuels, that last statement in your written testimony really disturbs me. Given that the increased cost of processing the additional patent work load in fiscal year 1990 and 1991 must be paid from current and projected revenues, the bottom line is that we have—we expect to have—little, if any, flexibility in our non-trademark fee accounts during the next two years.

That is not a healthy thing, is it? Or is it?

Mr. **Samuels**. Well I agree with you, Mr. Early. It is not healthy or desirable. It is dictated, though, by a number of factors.

Mr. **Early**. What are they?

Mr. **Samuels**. I guess the two main factors I would point to was the decision of Congress last year to require us to spend earlier than we anticipated some $12 million in surplus fees in order to cover a $12 million reduction in our budget authority. In addition, we do not have authority under our authorization legislation to increase our patent and trademark fees until fiscal year 1992. In other words, in our current authorization bill which covers us for the fiscal years 1989 to 1991, we are locked into the fees that went into effect last April, and we cannot adjust them until the conclusion of that fee cycle.

Mr. **Early**. For the record, will you provide, in your professional opinion, what if anything we could do to address that, that would also include that situation?

[The information follows:]

Flexibility in PTO Operations

The user fees which the PTO collects are advanced payments for services to be provided later. As such, excess fee collections in any year represent a double-edged sword. On the positive side, PTO has more fee revenues than planned for the current year. On the negative side, PTO workload and costs for the next year will be higher than planned. Prior to FY 1989, excess fee collections were primarily carried forward into the next year. Starting with FY 1989, the PTO is requesting to use excess fee collections in the year they are collected to address the higher workloads more promptly. If our current projections are correct, all non-Trademark excess fee collections will be used in FY 1990. Hence there will be little or no surplus carried forward, which will reduce PTO's flexibility in FY 1991.

When the Congress requires the PTO to use excess fee collections to offset budget authority, our ability to provide timely service with high quality is compromised. Sequestration of user fees would also fall into this category. Under current legislation, the budget authority needed for PTO operations would drop to 20% of total costs by 1995. By enacting our budgets as planned, savings in budget authority would continue to be realized. Further changes in legislation to this effect would enable PTO to use fees to offset costs which currently must be paid by budget authority.

OMB BUDGET CUTS

Mr. EARLY. Now what was your budget request to OMB, and what items did OMB eliminate from the request and what will be the impact of these reductions on the operation of the Patent Office?

Mr. SAMUELS. For the most part, Mr. Chairman, our budget request to OMB is one which we are presenting to Congress today. OMB and the Department made very minor changes, and they were primarily in the automation area, reducing our request for such things as greater security, more staff to handle procurements, things of that nature.

But I could say truthfully that we received probably 99.9 percent of everything that we requested.

Mr. EARLY. Well, why don't you provide for the record even the small reductions, especially in automation. I cannot understand that. Why should they reduce your budget when you are bringing in more money than you are spending?

Mr. SAMUELS. I think it was a feeling on the part of both the Department and OMB that these requests that they cut were "overhead" which we could meet through adjustments in our own personnel within the office.

Mr. EARLY. Some bureaucrats think that any time they scrutinize the budget, if they do not make a change, management will not know that they changed anything. I want to know why they cut anything, and specifically I want to know what the automation cuts are.

Mr. SAMUELS. We will respond to that, Mr. Chairman.

[The information follows:]

ADMINISTRATION CUTS

The budget review process through the Department of Commerce and OMB resulted in the following changes to our budget request for FY 1991:

Program level

	($000's)
Request to Department	$354,064
Request to OMB	354,309
Request to Congress	353,647

As the numbers indicate, there were some pluses and minuses, but the net effect was to grant nearly all of the PTO's original request.

The Office of Management and Budget reduced the 1991 budget request of the PTO by $862,000. The reductions are the net of inflationary adjustment reductions (−$2,034,000), management savings (−$1,808,000), and funds for the pending 1991 pay raise (+$2,980,000). There were no reductions to the automation programs of the PTO nor to the PTO automation initiatives for 1991.

FY 1990 BUDGET REDUCTIONS

Mr. EARLY. Now how much of your 1990 appropriation was sequestered, and what was the impact of this reduction on the operation of the office?

Patent and Trademark Office
Salaries and Expenses

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$73	$48	$69	$74
Pamphlets	29	41	44	47
Audiovisuals	6	5	7	7
Total	$108	$94	$120	$128

Narrative Statement

Technical literature documents in the form of periodicals and pamphlets are essential in the patent and trademark examination process. The printing costs are reflected above. The requirement for technical literature documents is directly proportional to the workload and resultant production in patent and trademark examination activities. The use of audiovisuals is primarily for PTO's National Inventors Day program.

Mr. **Samuels**. Well we had a total BA reduction of approximately $16 million; $4 million was an across the board reduction, BA, and $12 million was to be made up from surplus fees which I alluded to earlier; so we had a total reduction of $16 million. That was the amount of the Congressional cut to our budget request. It reduced our appropriation below the Gramm-Rudman baseline so that there was no BA sequester. However, our fees were sequestered by $2,520,000.

Mr. **Early**. In your professional opinion, do we often spend money to save money? You are bringing in three dollars for every dollar you spend, according to your statement—and that is accurate, is it not?

Mr. **Samuels**. We are bringing in three dollars for every dollar that we spend? I am not sure I follow that.

Mr. **Early**. Offsetting collections are projected to total $241 million, and the budget authority request was $112 million, so you are really bringing at least two to one.

Mr. **Samuels**. Right. Sixty-eight percent of our total operating costs are covered by fees, right.

Mr. **Early**. Would those reductions, in your professional opinion, reduce what you might have done in fees?

Mr. **Samuels**. Well during this year, Mr. Chairman, I think that we were able to cover those reductions because fortunately we had surplus fees that we could draw upon. But the point that I was making at the conclusion of my testimony is that that flexibility is now gone, and we do not have those reserves to draw upon in the near future.

So while it did not hurt us near-term, in the long term, it will hurt us. And it also, if I may make a comment, Mr. Chairman, since part of the money that was taken from us was the fees, in my view, this really represents a breach of the commitment that we made to our user communities, the patent and trademark applicants, the people who pay these fees, back in the early '80s, when we significantly increased all of our patent and trademark fees. What we told our user community was that you agree to pay these higher fees and we will provide you with more prompt and higher quality examination. And now to see these fees being taken for purposes totally unrelated to the proposes of the Patent and Trademark Office is obviously disturbing, not only to us, but I think to our user communities as well.

PATENT PENDENCY

Mr. **Early**. I am fairly impressed with you and your group, but I have trouble with your statement where you say you maintain the average time at 18 months. Are you telling the committee that this past year the time for patent pendency was 18 months?

Mr. **Samuels**. The average pendency time for the examination of all the patent applications was down to 18 months on September 30, 1989.

Mr. **Early**. Do you think this budget is going to let you—with those other stats you gave us, with the increased workload—I do not see the relative increases in personnel and budget. Do you think you are going to maintain that? You say it is a goal to maintain it. Do you think you will achieve that goal with this budget?

Mr. **Samuels**. Yes, Mr. Chairman. If we get the amount of money that we have requested, we believe that we will maintain the 18 month pendency. The request includes hiring an additional 375 patent examiners, hiring additional clerical support for those examiners. And we think that if we get these resources, that we will make 18 months.

I might add, Mr. Chairman, that the 18 month goal was a goal of the office for about eight or ten years.

Mr. **Early**. For a long time.

Mr. **Samuels**. And now that we have made it, we do not want to slip back to what the situation was in the early '80s, when pendency was in the mid-20s, and projections showed us going to four year pendency. There is a lot of hard work and effort by the PTO management and obviously by our patent examiners, and a lot of extraordinary efforts undertaken in order to make this 18 month pendency goal.

And it is certainly our intent and we expect to maintain that goal in the future years, and this budget will permit us to do it, at least in 1991.

AUTOMATION SCHEDULE

Mr. **Early**. My reservations are on the automation, Mr. Samuels. I just think we are not being progressive if we do not do everything in that particular respect. And then in your statement on page 27 of the budget justification is listed a request for an increase of approximately $14 million for the automated patent system.

Is that going to keep you on schedule for the three year plan you mentioned in your statement?

Mr. **Samuels**. Well, we will have the fourth edition of our Automation Master Plan to this Committee sometime this Spring. The increase, we are asking for is a net total increase in the automation budget of $17 million, the vast majority of which will be for the use of the Automated Patent System. And this would permit us to continue our plans for the gradual deployment of the full system to the Patent Examining Corps. It will permit us to continue with system development. It will permit us to continue with the loading of the images, and it is consistent with the recommendations of the Industry Review Advisory Committee.

Mr. **Early**. Now is your person in charge of automation here today?

Mr. **Samuels**. Yes, he is.

Mr. **Early**. Is he ready to testify that we are doing everything with this budget that we could be doing to expedite our automation as quickly as possible? Can we hear from him?

Mr. **Samuels**. Sure.

Mr. **Giammo**. I am Thomas Giammo, Assistant Commissioner for Information Systems.

We can always do more with more money. However, I think we are doing what reasonably can be accomplished without wasting money. There is a certain pace that you have to do—we are going through a period for about two years now where we had to consolidate some of the attempts we had done before. We have had to redo some of the systems. We are finishing that phase now.

We are moving, I think, in a very reasoned way in the 1991 time period to begin to do the deployment of the system beyond where we have it now. The strong increases will come in 1992, 1993, and 1994. We are anticipating a very large budget request for those periods of time, as we begin to get confidence in what we have done and we are able to deploy it throughout the entire corps.

Mr. **Early**. Will you expand for the record on why those big increases are for 1992, 1993, and 1994 and not now? I would like you to do that for the record.

[The information follows:]

OUTYEAR INCREASES FOR AUTOMATION

The major cost elements in our current planning for FY 92 and beyond call for the acquisition of the optical drives needed to store the U.S. and foreign patents, the workstations to access the data base, printing capability to support both the patent examiners and the public, and a high capacity network to deliver the data to the workstations.

We intentionally targeted the beginning of deployment in late FY 1992 to take advantage of the significant technical improvements forecast by that time frame. We expected that these improvements would result in a much more stable technology, with improved performance and at very attractive prices—especially in the optical storage and networking technologies. The other major factor affecting both the beginning of deployment and significantly influencing the pace of deployment thereafter, was the availability of conditioned space. Another consideration, though not as important as the availability of space, was the capability of the PTO to logistically manage such a large deployment. While, in retrospect, we may have been somewhat conservative in our estimates of what we could logistically accomplish, the view is that we face a substantial challenge in loading over 5 million patents—once to the fast access optical devices, then again to the backup devices. Also, over 1,500 examiners must be trained, and 1,400 to 1,500 devices installed.

Mr. **Early**. On Mr. Samuels' statement, he says automation is expected to cause far-reaching changes in PTO's operating environment, some of which have already taken place in the trademark operation; do you agree with that?

Mr. **Giammo**. Yes, I think it is going to have a fundamental change in the entire office over the next decade.

Mr. **Early**. Do you think it will result in less people and probably produce more product with automation?

Mr. **Giammo**. You have to keep in mind the projections that were made in Mr. Samuels' statement regarding the phenomenal increases in workload. And I think what this will allow us to do is in terms of the total number of people—probably will have to go up. We are getting tremendous increases in the amount of workload.

What we are hoping to do is to be able to maintain the staff at a reasonable level while maintaining quality. What hurts a lot is when you get a lot of increases in workload. There is a tendency to let up on quality. I think one of the primary advantages of the automated system is that it allows individuals to accomplish more in the same period of time, working on applications. So that we are not standing still in trying to reduce our staff. We are swimming upstream against a very, very strong current.

Mr. **Early**. Still, you are not really running against it, either, with the automation.

Mr. **Giammo**. We have not yet made great inroads; I will be honest about that. I think we are on the verge of it. We have a very, very successful test bed operation with one group. We have one group out of 16 examiner groups that is fully automated now with both a text and an image search system. The experience with that has been extremely favorable.

We are moving to a second group in June. That will give us enough confidence in fine-tuning the system, so that again, starting in the 1992 time frame, we will begin massive deployments of the system into the entire corps. Now see, that is where the money comes. That is when you are stockpiling work stations with people; you start talking storage medium to store all the patents so that they can reach them on line and so forth.

AUTOMATED PATENT SYSTEM EXPENDITURES

Mr. EARLY. All right. Mr. Samuels, with regard to the justification of $14 million, which you say $17 million on page 27 of the justification, I want you to provide for the record what the total is in current and planned expenditures for the system.

Mr. SAMUELS. Yes, sir.

Mr. EARLY. I also want you to tell us when the system will become 100 percent operational for what you want, and what impact this system will have on patent quality and timeliness. I would like you to do that for the record.

Mr. SAMUELS. I certainly will, Mr. Chairman.

[The information follows:]

APS EXPENDITURES AND IMPACT

The FY 1991 Budget request supports the following current and planned expenditures for the APS System:

Fiscal year:	($000's)
1990	$35,372
1991	45,797
1992	47,727
1993	60,484
1994	60,386
1995	53,569

As previously stated, we are planning on substantial increases to our budget request in the FY 1992 to 1996 time frame. The major cost elements call for the acquisition of optical drives needed to store patent data, workstations to access the database, printing capability, and a high capacity network.

The Text Search system is already 100% operational and deployed to all 16 patent examining groups. The Image Search system is now deployed in one of the 16 examining groups. A second deployment is planned for this fiscal year. With the experience gained from these first two groups, and with new contracts in place to provide the necessary equipment, we will begin deploying to the remaining groups in FY 1992 and complete deployment to all groups in FY 1996.

Although the major benefits of the APS system are to be gained in the quality area, APS will also enable us to maintain patent quality and pendency despite significant expected increases in the size of the U.S. and foreign patent search files. The provisions of APS text and image search capability of the U.S. and foreign patent files, as well as providing access to non-patent literature, will permit examiners in the same amount of time they currently have to examine an application. The existing paper files cannot cope with this challenge for two reasons. First, they cannot be maintained at the level of integrity necessary to support an accurate determination of patentability by the examiners. Second, they are not sufficiently flexible to permit the deployment of the new methods of searching which the examiners need to cope with the volume of information the files will hold.

Mr. SAMUELS. If I could just follow up on what Mr. Giammo said. There is money in this 1991 budget request to begin deployment of what we called in the office "Project 4,000." And what this will provide is a PC for many if not all of the patent examiners in the Patent and Trademark Office.

This will allow them to compose their own office actions and to take advantage of various other office automation features. We think that this will result in greater productivity. It will also have the benefit of a reduction in our clerical work force. In the fiscal year 1991 request, for example, we projected a reduction of about 33 positions in the clerical support because the 1991 request will enable us to, I think, put 400 PCs on the desks of patent examiners. And we continue to plan to expand that.

It is a five year program that will cost approximately $10 million, but the offsetting gains will exceed those costs. So it will be a net plus to the Office.

Mr. Early. That is how I think we should be going. How much is included in your 1991 budget request for APS, and how much did you request of OMB for this?

Mr. Samuels. For the Automated Patent System, total budget request, I believe, is about $45 million.

Mr. Early. And how much did you ask OMB for originally?

Mr. Samuels. That is for the Automated Patent System, $45 million. What we asked OMB for was approximately that amount, Mr. Chairman.

Mr. Early. Okay, if you find that it was reduced, even a little, I want you to put that amount in the record.

Mr. Samuels. We will.

[The information follows:]

APS Contract Cuts

The initial FY 1991 budget proposal submitted by the PTO to the Secretary of Commerce proposed $46.062 million in funding for APS. During discussions with the Department, and as a result of refinements in the PTO's cost model, the Administration agreed on a proposed new funding level and on an adjustment to the deployment schedule. The resulting OMB FY 1991 budget submission requested APS funding of $45.797 million.

PATENT APPLICATION INCREASE

Mr. Early. You are projecting an increase in patent applications from 140,000 in 1990 to 177,000 in 1991. What accounts for this substantial increase?

Mr. Samuels. Basically Mr. Chairman, there has been an explosion in technology both here and world wide in fields of biotechnology, the computer arts, robotics, and superconductivity. It is just an explosion in technology. And whenever that occurs, we always see, and we see right now, an increase in filings.

This is not unique to the United States. The European Patent Office and the Japanese Patent Office are experiencing the same phenomenon.

Mr. Early. How do we maintain our 18 month average with that type of increase?

Mr. Samuels. Well we have been able to do it, Mr. Chairman, through aggressive hiring and training of our patent examiners, through our automation efforts, through maintenance of our classification systems, and through clerical support. Basically this 1991 budget request and other requests that have come up are for the most part for the people that we need in order to examine these applications and to process them.

The whole patent pipeline, if I could add, Mr. Chairman, is a very delicately balanced thing, and you cannot take from one area—for example, clerical support—without having negative impact on patent pendency.

Mr. EARLY. Don't we do that?

Mr. SAMUELS. I am making the point that that is a delicately balanced pipeline.

Mr. EARLY. Regarding the $26,249,000 and the 585 professional and clerical staff positions to handle this workload while maintaining the 18 month average, how did you determine the number of additional positions?

Mr. SAMUELS. Well with respect to the number of patent professionals, we have models that have been finely honed over the course of the last several years, which enable us to project our hires in various fields and what the attritions will be. Then we are able to model how many examinations somebody who has been in the office a certain number of years will be able to produce.

So we put all that information together in a statistical model, and we can fairly accurately predict how many more people we will need in order to examine the applications within a certain pendency period.

BIOTECHNOLOGY APPLICATIONS

Mr. EARLY. Now in your statement, you said that in the critically important biotechnology discipline, we have worked hard to build a cadre of well qualified examiners and to supply them with personal computers, access to commercial databases and other tools to search and examine this rapidly expanding field of technology.

Are you telling us that they all have the computers and the tools that they should have?

Mr. SAMUELS. Yes, we have made special efforts with the group 180, which deals with the biotech applications, to make sure that they have PCs available to them if they want them so that they can compose their own office actions, have access, on line access to commercial databases and other search tools.

I should add that we have been working very closely with the biotechnology industry. We have set up a biotech institute. This enables the PTO to communicate with those in industry and to learn from them. They provide us with a lot of searching tools and training for our patent examiners.

Mr. EARLY. Are you satisfied with your outreach for that particular type of expertise?

Mr. SAMUELS. Yes, I think we have had a very cooperative situation here with respect to the PTO and the biotech industry. They seem willing to help us. We acknowledge that we have a problem, but we are working toward reducing pendency in that area, and the biotechnology industry has been very helpful to us.

PATENT INTERFERENCE CASES

Mr. **Early**. Mr. Samuels, what are interference cases, and why are they increasing?

Mr. **Samuels**. Interference cases are when you either have a situation where there are two applications or an application and an already issued patent, in which it is determined that the same subject matter is claimed in either the bulk of those applications or in an application and in the patent.

I do not have the figures before me as to whether they are increasing or not. The problem with interferences, Mr. Chairman, is that they take a long time to resolve. Under the old rules and the mid-'80s, we changed them. But under the old rules, it was not uncommon to take five, ten, even twenty years to resolve an interference.

Under the new rules which went into effect in the mid-'80s, our goal is to reduce the time it takes to rule on an interference proceeding to about two years, and for the most part we are meeting that goal. But still, interferences, just by their very nature, are very complex and very cumbersome procedures.

BIOTECHNOLOGY APPLICATION

Mr. **Early**. Back to the biotechnology. On the biotechnology patents, are they meeting the 18 month average?

Mr. **Samuels**. No, Mr. Chairman. As I indicated, we acknowledge we have problems. The average pendency as of the end of fiscal year 1989 for biotech field was, I believe, 26.3 months. But that is down from what it was earlier. I think it reached 27 months, at one point, I think in April of 1988. So there is some improvement, but far from the 18 month pendency.

Our goal is to meet that 18 month pendency by the end of fiscal year 1992.

Mr. **Early**. Do you anticipate this budget will continue to decrease that biotechnology patent?

Mr. **Samuels**. Yes, it would, Mr. Chairman.

TRADEMARK APPEAL CASES

Mr. **Early**. You also indicate that trademark appeals cases are increasing. To what do you attribute this increase?

Mr. **Samuels**. Trademark filings are increasing. Primarily as a result of the operation of the new trademark law. The new trademark law provides another basis for which U.S. applicants can seek a Federal trademark registration.

Last year, we had about 83,000 applications, and we had planned for this year, as a result of the new law, about a 25 percent increase in filings to about 100,000. But it is primarily as a result of the operation of the new law.

Mr. **Early**. So you do not detect any particular or significant trends either in the source of violations or the plaintiffs?

Mr. **Samuels**. Well, I was addressing in that previous answer with respect to the filings. New appeals that applicants take when they receive a final rejection from the office go to the Trademark Trial and Appeal Board. We are anticipating an increase in workload for that body as well, primarily as just a function of filings.

About four percent of all applications work their way up to the Appeal Board. So as the filings go up, the workload of the Board goes up.

Mr. **Early**. So it is just that? It is not a source of violations or the plaintiffs themselves?

Mr. **Samuels**. Correct.

TRAINING NEW HIRES

Mr. **Early**. How about with regards to training? You request an increase of $359,000 for the Patent Academy to permit assimilation of a large number of new hires.

Does the office have a sufficient number of experienced staff to train new hires?

Mr. **Samuels**. Well, Mr. Chairman, the 1991 budget request provides for expansion of the Patent Academy. We are looking at more innovative ways in order to provide the necessary training for our new patent examiners.

For example, one thing we are looking at is rehiring recently retired patent examiners who have the interest in coming back and training new people within the office. Training is a very time consuming job, as you can imagine. And if we can have more people, former examiners who are obviously highly experienced and willing to put in the time and effort involved, that is all to the good, and frees up the other people within the training academy to do other things as well.

Mr. **Early**. Who is going to keep up with them? You know, we don't save money by not training.

Mr. **Samuels**. We are very much committed to providing all of our new employees, professional employees, with the necessary training. It takes years though, Mr. Chairman, before a patent examiner is able to examine applications with any degree of speed and quality, necessary quality.

CD–ROM DISKS

Mr. **Early**. Can you give me a little description on those CD-ROM disks?

Mr. **Samuels**. Right now, Mr. Chairman, we have a couple of products that we provide to our patent depository library network. Patent depository libraries are libraries, public libraries, university libraries that are located in 47 of the 50 States.

What we have on these CD–ROMs is a product which we refer to as CASIS, which is a classification system to patents that have been issued. Somebody can come into a PDL and have access to the CD–ROM product and get certain information regarding a particular patent by searching a variety of appeals.

We also recently, Mr. Chairman, made available a trademark CD–ROM, which is now available in a number of the patent depository libraries as well.

Mr. **Early**. Is that the facts that's stated, that those particular specific disks that——

Mr. **Samuels**. It's a very economical way to make information available. The problem with CD–ROMs is that they cannot be updated on a daily basis. So they do not have the latest information on them.

But I think that they are a valuable source of information. It doesn't supplant our automation activities. It's a supplement or adjunct to it.

PUBLIC CONSIDERATION OF PTO STAFFING LEVEL

Mr. EARLY. Let's go back to fee collections. You know, they are estimating an increase of their $51,643,000 in fee collection for fiscal year 1991.

Since fees offset about two-thirds of the entire cost of running the office, does the office believe that more consideration should be given to the impact on the public in determining an appropriate staffing level for this office?

Mr. SAMUELS. Well, Mr. Chairman, before we adjust fees, we go through a public hearing process, and we hear from all of the various constituent groups.

I think though that, by and large, people are satisfied with the level of fees. They'll complain whenever you increase fees but I think they do realize that they are getting——

Mr. EARLY. I am talking more of the level of staff.

Mr. SAMUELS. When we adjust fees and increase fees, for the most part it is for staff. So we do consult with our constituent groups.

Implicitly, whenever they talk to us about our fee levels, what they are really talking about in large part is our staffing needs. And if they felt that our staffing needs were too high, they would make that point when they came to testify with respect to the level of fees that we were charging.

Mr. EARLY. But I want to make sure that we are collecting the most that you can in fees and that you keep up with the 18 months pendency rate.

EXCESS FEE COLLECTIONS

Now, fee collection in the office's budget submission for fiscal year 1987 and 1988 and 1989 were understated from $10 million to $24 million when compared to the actual fees collected in these years.

First, why was there such an error in collections anticipated? And on what basis does the office project the estimated fee reimbursement in its budget submissions?

Mr. SAMUELS. I think the main problem, Mr. Chairman, is that we prepare these budgets two years before the actual operation of that fiscal year. It's very difficult for us to be able to foresee with total accuracy what the actual filings will be, especially when we're talking about technological developments. There can be a breakthrough any day in a certain field which will lead to an explosion of applications in the office.

I think we are doing a better job today than we have in the past in being able to predict our level of filings, but I don't think we are ever going to be able to predict with a hundred percent accuracy what those level of filings will be.

Mr. **Early**. I know 100 percent. But, that's the really quality of the office; I would think that it should be better than a $10 to $24 million discrepancy, so that we can better plan.

Mr. **Huther**. If I might add, Mr. Chairman, as Mr. Samuels pointed out earlier, once we set the fees under the provisions of our authorization bill, those fees remain in place for a period of three years.

So what we do is attempt to construct our budget plans around our three-year workload estimates. And we have to do that, in effect, four years before the final fee is collected in the third year of that cycle.

So what we do is use a different variety of trend analyses, picking experience over a long period of time, ranging back six or 10 years in some cases, to test whether or not our workload forecasts are correct.

The $10 million that you referred to is admittedly a large sum of money. When you view it in the context of a $615 million fee collection program, such as we are doing in the fiscal 1989-1990-1991 timeframe, that represents a fairly small percentage of that total workload.

Mr. **Early**. Ten is on the lower end though. It's 10 to 24. And with a three-year plan, I would think, from 1987 to 1988 to 1989, that when you come in, even though it is put together, you should be able to readjust it a little bit and be a little closer.

Mr. **Huther**. Well, that's partly why we developed in this submission before you four different ways of forecasting the filing trends in the fiscal year 1991 timeframe which we brought to OMB, and also to international organizations, to review the methodology that they use as well.

So, as Mr. Samuels points out, we don't think we've got a perfect crystal ball with which to do that forecasting. But we do believe that we are getting more accurate as time goes on.

SPACE INCREASE

Mr. **Early**. The budget request also includes $6 million for increases for additional space.

Why is this necessary and what are the plans?

Mr. **Samuels**. Space is a critical need to the PTO, Mr. Chairman. We need more space because we are hiring more people. We are automating. In order to automate, we have to retrofit a number of the buildings that we are currently located in.

By the way, we are currently located in all or part of approximately a dozen buildings in the Crystal City Complex. We have a total space budget this year, Mr. Chairman, close to $30 million. And it's because we're expanding.

Mr. **Early**. And would we actually save money if we put them all together?

Mr. **Samuels**. Consolidate? We are right now engaged in strategic planning with respect to what our space needs will be in the near future.

Our leases will expire in 1996 though we have a five-year option on them. We are actively pursuing what our alternatives are. Do we stay in Crystal City in the buildings that we are in? Do we consolidate in one big building, and if so, where? We are looking at various options right now.

HIRING PROFESSIONALS

Mr. **Early**. Has the PTO had any problems in attracting attorneys and other professionals given the specialized nature of your work?

Mr. **Samuels**. Well, Mr. Chairman, I guess in certain disciplines it is a little harder to attract qualified employees than in others—the biotech area, for example, where private industry can pay people two to three times as much as we can.

We are, in particular, having problems. But I think our main problem is not so much hiring the people. Our real problem is in retaining them. What we typically find is that after somebody has been in the office two years or three years, and maybe has gone to law school on the Government, at least in part, that they are extremely valuable assets to private industry, whether it's law firms or industry. I think the statistics show that 50 percent of the patent examiners that we've hired over the last three years have left the office. And that just gives you some idea as to the retention problems that we are experiencing.

APS PRIORITIES

Mr. **Early**. Tell me, if additional funds were available in fiscal year 1991 for the automated patent system, what would PTO's priorities be? For what purposes would additional resources be allocated?

Mr. **Samuels**. With respect to the Automated Patent System, I supposed that we would move ahead more aggressively with respect to the loading of the images and the deployment of the system to the various art groups. We have 16 art groups.

The full Automated Patent System right now is only deployed in one. And our plans for fiscal year 1991 is only to deploy it to one additional group. So, you see, there are a lot of other patent examiners, a vast majority who will not have access to the full system by the end of 1991 under this budget.

So if we did get additional resources, we would move ahead more aggressively in those areas.

FLEXIBILITY IN PROFESSIONAL SALARIES

Mr. **Early**. Fine. Now, first, do you have the same flexibility with regards to where you say you have a problem retaining these attorneys?

The SEC has some flexibility to adjust those salaries. Do you?

Mr. **Samuels**. Well, we have worked with the Office of Personnel Management with respect to gaining authority to pay special pay rates for our biotech examiners. And to that extent, we have some flexibility.

Mr. Huther reminds me that all of our engineering professionals are eligible for special pay rates.

In sum, Mr. Chairman, if I can make the point, what we are talking about with the special pay raise and other means to pay more money is just several more thousands of dollars. And when you're talking about being able to pay somebody maybe $35,000 as opposed to $30,000, when they can go out and make $70,000, it's not going to make much difference.

Mr. **Early**. Why don't you identify a couple of cases of people that have left. There doesn't have to be names, but cases where they—what the amount of money that they left for. Could you provide that?

Mr. **Samuels**. Okay.

[The information follows:]

ATTRITION OF PROFESSIONAL EXAMINERS

The best way for us to depict the impact of private sector salaries on losses of professionals to the private sector is by providing the following table. The numbers are not comprehensive, but they are representative of the patterns we've been experiencing since 1988.

Years of experience	Number of staff	Average PTO salary	Average new salary	Highest new salary
Patent examiners:				
0 to 1 year	3	$23,000	$36,333	$46,000
1 to 2 years	13	27,278	44,961	65,000
2 to 3 years	6	28,852	51,857	70,000
3 to 4 years	13	34,580	50,846	59,000
4 to 5 years	20	40,818	59,750	79,000
5 years	6	48,592	63,000	76,000
Executive level managers	2	70,000	150,000	180,000
Examiners-in-chief	13	75,500	170,000	300,000
Trademarks				
Managing attorney	1	63,000	83,000	83,000
Trial and appeals board attorney	1	76,000	90,000	90,000

Since 1982 we've hired highly qualified patent professionals with a grade average in school of B or better. These individuals are doing excellent work as patent examiners, but they are also highly attracted toward the private sector. The private sector has, through their ability to pay substantially more money for salaries then we can, been hiring many examiners from us while still in the middle of their law school program or typically upon completion of law school and receipt of a Juris Doctor degree or its equivalent. This accounts for the large number of examiners leaving after about four years experience in the Office.

Our ability to pay special rates for our examiners only makes us competitive with other government agencies. We lag far behind the private sector in what we can pay our people. Without exception, the Examiners-in-Chief who left the Board of Patent Appeals and Interferences indicated they were leaving the PTO for economic reasons.

Mr. **Early**. Gentlemen, we want to thank you for your testimony. You made an excellent statement and fine presentation.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Early

FY 1990 Pay Raise Cost

QUESTION:

What is the total cost of the January 1990 pay raise for the Patent and Trademark Office and what is the cost of the pay raise for senior executives?

ANSWER:

The total cost of the January 1990 pay raise for the Patent and Trademark Office is $4,157,000 in fiscal year 1990. This includes $76,200 for the cost of the pay raise for senior executives.

QUESTION:

How will PTO absorb this cost? What impact will these reductions have on your agency's programs? Will these reductions have any effect on staffing levels or the length of time positions must remain vacant?

ANSWER:

In FY 1990, Congress directed the PTO to absorb the full cost of the January 1990 pay raise. The PTO will do so by using 1989 and 1990 excess fee revenue. In the Patent program, $3,831,000 of anticipated 1990 excess fee income will be used. In the Trademark program, $326,000 of 1989 excess fee income carried forward will be used. Use of excess fee income will prevent any negative impact on PTO programs. As such, there will be no impact on staffing levels or the length of time positions must remain vacant.

QUESTION:

Do you anticipate any other shortfalls which would require you to reallocate resources?

ANSWER:

No. The only unanticipated costs would be related to the higher than anticipated workloads the PTO is experiencing. The PTO will cover these costs and use unobligated balances carried forward and anticipated 1990 excess fee income. The PTO does not anticipate any reallocation of resources which would require a reprogramming notice.

QUESTION:

What is the full year cost of the 1990 pay raises in 1991? How much is included in your 1991 request for this purpose and how much are you being required to absorb? If you are absorbing the cost, how are you doing it?

ANSWER:

The full year cost of the FY 1990 pay raises in 1991 is $5,543,000, of which $5,156,000 is for the Patent program and $387,000 is for the Trademark Program. The full payraise amount for the Patent program is requested in the 1991 Budget. The Trademark program payraise is fully funded by offsetting fee collections.

Patent Workload

QUESTION:

The budget justification shows that you anticipate an increase in your original FY 90 estimate in patent applications (from 140,000 to 162,000) and a further increase in FY 91 (from 162,000 to 177,000). This is a 25% increase. What accounts for this increase?

ANSWER:

The rapid increase in growth of patent application filings is a world-wide phenomenon. In particular, the USPTO, EPO and JPO have experienced enormous growth in receipts during the 1980's.

The ability to predict application filings growth is at best an empirical process. The USPTO uses a mathematical trend analysis to forecast filings based upon our most recent ten years of actual application filings. Despite our best efforts to project filings, actual filing rates continue to exceed our estimates. The unprecedented growth has continued unabated for eight years with no sign of slowing.

The reasons for this growth are many-fold, but we are unable to determine which factors contribute most directly to this phenomenon. Strength of and confidence in the patent system apppear to contribute to applicants seeking protection for their invention. Perhaps, more significantly, world-wide growth in research and development expenditures may be an important economic indicator which seems to correlate most favorably with application filing trends.

APS Contracts Staff

QUESTION:

PTO is requesting a permanent funding base for APS Contract management staff. Why is this important to have?

ANSWER:

The APS contracts staff was established by the Department of Commerce in 1986-1987 to oversee contracts associated with the development of the APS system. In 1988, the contracts staff was transferred from DOC to PTO under the direction of the Assistant Commissioner for Information Systems. There was no transfer of positions or associated FTE. Since 1988, the PTO has absorbed the additional contracts staff within its ceiling. The FY 1991 request is an effort to formally obtain an increase in staff ceilings, recognizing the Contract staff's existence.

The APS Contracts staff provides contracting services, support and guidance in all APS related contracting efforts. The staff provides technical support to the Assistant Commissioner in efforts related to the preparation, negotiation, and execution of APS task orders. It also monitors contractor performance, and ensures compliance with the Federal Acquisition Regulations, the FIRMR, and other applicable regulations.

Appropriate Patent Pendency

QUESTION:

PTO has finally achieved and is now maintaining an 18 month patent pendency. Since this goal was set several years ago, is this satisfactory today or is further improvement needed? ...As APS is implemented, could the patent pendency be reduced further? What would be a desirable level?

ANSWER:

Achieving the eighteen months' average pendency goal was a major USPTO accomplishment in 1989. This eight year effort culminated during a period of unprecedented growth in patent application filings. All indications from the Patent community are that eighteen months is the most appropriate pendency period.

Achievement of the eighteen months' pendency goal provides significant benefits to industry and the public, most notably by
(1) protecting research and development investments,
(2) encouraging more rapid expansion of technology, and
(3) preventing importation of infringing products.

The optimum patent pendency period of eighteen months was first established in 1964 at a time when average pendency stood at 35 months. The need for and desirability of having an eighteen months' pendency program was set forth in a comprehensive study completed in 1972 entitled "A Study of the 18 Month Patent Pendency Goal - Its Validity, Attainability and Impact on the U.S. Patent

System." In 1979, the need for this pendency program was confirmed in the Zero Base Analysis conducted by the PTO, which was endorsed by the Office of Management and Budget (OMB).

In 1980, patent pendency stood at 22.6 months and without an infusion of resources the 1981 PTO budget model showed that pendency was headed for 48 months by the late 1980's. As indicated in the February 2, 1981, U.S. News & World Report article entitled "Patent System a Drag On Innovation", the long delays in getting patents were intolerable and Congressional action was sought to speed up the process.

The goal of shorter pendency was being sought during the late 70's and early 80's. In a letter to the Senate Appropriations Subcommittee dated February 26, 1979, Tom Arnold, past Chairman of the Patent, Trademark and Copyright (PTC) Law Section of the American Bar Association (ABA), and then President of the American Patent Law Association, said "I write because we find a crisis situation developing in the PTO." He stated that the delay in patent pendency was creating a situation damaging to the country's pace of technological development, balance of international payments, and commitments to new business ventures.

In a house hearing before Chairman Kastenmeier in 1980, Mr. Robert B. Benson, another past Chairman of the PTC Section of the ABA stated his concern regarding increasing pendency as follows:

> We are really asking to upgrade and make the U.S. Patent Office a first-class operation that can handle patents and get them out in a reasonable time so the businessmen and others can make investments based on those patents.
>
> I mentioned earlier, one time we had an objective to get the pendency down to 18 months, because if you file in many foreign countries based on a U.S. case, the patents are published at 18 months. That's common under PTC [Patent Cooperation Treaty], and yet we are going in the wrong direction.

Also in 1980, the PTC Section of the ABA passed the following resolution:

> Section favors in principle funding for the Patent and Trademark Office adequate for staffing and material at a level to permit high quality examination of patent applications with an average pendency time of 18 months and to provide adequate and timely services to the public.

The FY 1982 budget hearings were the scene of an even more emphatic call for reduced pendency. Former Commissioner Donald Banner, speaking for Intellectual Property Owners, Inc., said the "increase in backlog, and in average pendency, is a serious matter." He went on to state "We are trampling on our technology seed corn, and we shall regret it."

Former Secretary Baldrige, responding to the public concerns regarding the PTO, submitted proposed legislation, subsequently enacted in August 1982, to significantly increase user fees as a means of financing PTO's program improvements, including eighteen months pendency goal.

In 1985, the eighteen months' pendency was officially made a Department goal. Secretary Mosbacher reaffirmed the Administration's commitment to eighteen months' pendency in his May 5, 1989 letter to the Director of OMB wherein he included this goal as one of the Department's major objectives.

This Administration continues to receive strong indications from industry and the Congress that the eighteen months' pendency goal is valid and highly desirable. A good example of this is found in Congressman Wyden's letter to Secretary Mosbacher concerning the need to achieve the eighteen months' pendency goal promptly for biotechnology inventions.

In a recent meeting of the PCT Section of the ABA on the subject of harmonizing the world's patent laws, strong opposition was voiced against publication of U.S. patent applications without the guarantee of exclusive rights. Publication of patent applications eighteen months after filing is the rule abroad because most foreign patent offices are unable to grant patents, render patentability determinations, or in many cases even provide a patent search within eighteen months. U.S. industry strongly prefers to know whether exclusive rights will be granted prior to having their inventions disclosed to the world. If patent rights are not to be granted, the technology in many cases can be maintained as a trade secret. In this regard, the USPTO is the only major patent office in the world that is able to issue timely valid patents.

Eighteen months pendency is meaningful as a goal for two reasons. First, it is the shortest pendency reasonably attainable under current statutes and rules. Second, eighteen months is an international publication standard. The major foreign patent offices in the world, including the Japanese and European Patent Offices, publish at eighteen months. Under the Patent Cooperation Treaty, international applications are published in eighteen months.

USPTO cannot assure you that the above-mentioned associations or their members which have been quoted will still advocate 18 months' patent pendency. When pendency is at a reasonable level, our users seldom either complain or applaud. However, Tom Arnold, referred to earlier and a Dean of the Patent Bar, when recently addressing the suggestions by other members of the Bar that pendency should be allowed to slip, stated:

> It seems to me crisply clear that industry needs early examination of applications and should never tolerate the postponement of the commencement of examination more than six months beyond the filing date, and should never relax the commitment vigorously to the target of 18 months to complete examination. Those time frames are realistic and industry needs that standard of excellence in aid of judging infringement issues before committing millions of dollars to plant and product design.

By the end of FY 89, more than half of the patent examining groups had achieved the 18 months pendency goal. Some groups, such as the computer structure and systems group and biotechnology group, have yet to achieve 18 months' pendency. It is our aim to reduce the pendencies in all examining groups to eighteen months while improving examination quality. Biotechnology Group 180 is slated to achieve 18 month's pendency by 1992.

Eighteen months continues to be the most desirable pendency goal which is reasonably attainable. USPTO does not anticipate that the 18 months' pendency goal should or could be lowered. APS is being deployed to improve patent quality. While it may have some impact on patent pendency, it is not anticipated at this time that APS will be used by the PTO to significantly reduce pendency in the future.

Patent Search Integrity

QUESTION:

How would you rate the current integrity of patent search files? What are your goals in this area for FY 91? The future?

ANSWER:

As with any paper-based, hand-filing system, the PTO's search files have inherent limitations. Data gathered from an ongoing USPTO file integrity maintenance program revealed an average file disintegrity of about 7%. File disintegrity is caused by removal of documents from the file for patent examination purposes, documents misfiled, mutilated documents, and missing documents. Disintegrity in high technology and high use areas is well in excess of the 7% average.

In anticipation of the introduction of the Automated Patent System (APS) and for budgetary reasons, the file integrity program was reduced in FY 1984. However, APS has been delayed, and while no systematic, current data are available, spot checks and complaints from the Patent Examining Corps indicate that some portions of the search collection need to be checked more thoroughly and frequently. Because base resources have proven inadequate in maintaining integrity given the rapid growth in the Patent files, we have requested $243,000 in the FY 91 Budget in order to reinforce our file integrity efforts.

The USPTO continues to rely on the future implementation, office-wide, of APS as the only viable permanent solution to the file integrity problem. Recognizing, however, that the paper file must continue to be the USPTO's main search information resource pending conversion to APS, resources will be allocated or requested as needed to avoid major deterioration of those files.

Intellectual Property Rights

QUESTION:

What role is the PTO playing in current trade negotiations on intellectual property rights? Are you providing assistance to the USTR? Can you give us some idea of the extent of the workload involved and the resources allocated for these activities?

ANSWER:

The PTO plays a significant role in the multilateral and bilateral trade negotiations on intellectual property rights. With respect to the multilateral negotiations in the Uruguay Round to achieve an agreement on intellectual property rights (TRIPs), the Assistant Commissioner for External Affairs serves as the deputy negotiator responsible for intellectual property policy. He, together with attorneys from his Office, works closely with USTR, other Government agencies, and private industry to assist on the development of standards in the fields of patents, trademarks, copyrights, trade secrets, and integrated circuit lay-out designs. They also assist USTR in the actual negotiations of the TRIPs Agreement in the Round.

Bilaterally, attorneys from the PTO also work closely with USTR in the implementation of the Special 301 provisions of the Omnibus Trade and Competitiveness Act of 1988, as well as the intellectual property components contained in other trade agreements and bilateral investment treaties. The PTO has assisted the USTR most recently with negotiations with the following countries: Chile, China, Egypt, India, Indonesia, Japan, Korea, Malaysia, Mexico, Pakistan, Poland, the Phillippines, Saudi Arabia, Taiwan, Thailand, Turkey, the USSR, and Venezuela. In addition, the PTO has worked closely with USTR in developing and expressing the views of the United States with respect to the recent EC deliberations on permitting reverse engineering or decompilation of computer software prompted by the proposed directive under consideration.

While it is difficult to track resource expenditures by specific activity, we estimate that we have spent approximately five staff-years during the last year on the Uruguay Round and 18 bilateral negotiations. These estimates are in addition to recurring work involving the World Intellectual Property Organization and routine forms of assistance on various activities requested by agencies within the Department of Commerce.

WEDNESDAY, FEBRUARY 28, 1990.

U.S. TRAVEL AND TOURISM ADMINISTRATION

WITNESSES

ROCKWELL A. SCHNABEL, UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM

LEE J. WELLS, DIRECTOR, OFFICE OF STRATEGIC PLANNING AND ADMINISTRATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. EARLY. Next we are going to hear from the United States Travel and Tourism Administration. And this will be the last item that we will consider this morning.

The fiscal year 1991 budget request for the United States Travel and Tourism Administration is $14,362,000. This is an increase of $240,000 above the 1990 appropriation.

We will insert the budget justifications submitted in support of this request into the record at this point.

[The justifications follow:]

Department of Commerce
United States Travel and Tourism Administration
BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION

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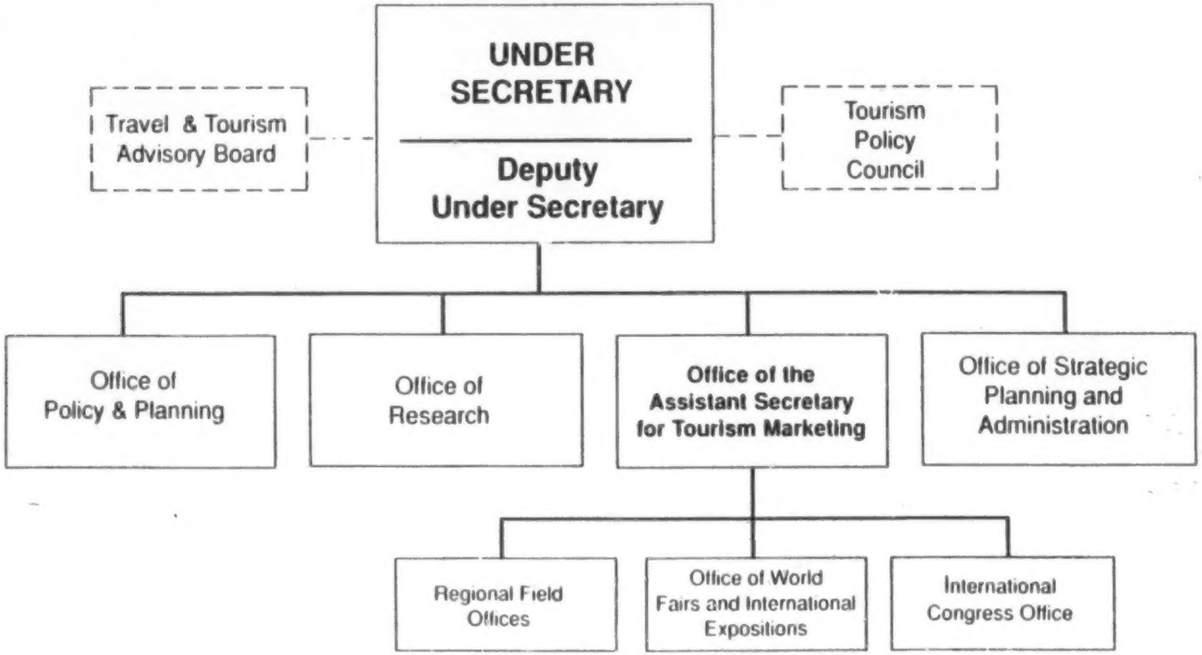
January 1990

U.S. DEPARTMENT OF COMMERCE
United States Travel and Tourism Administration


UNDER SECRETARY
Deputy Under Secretary
Travel & Tourism Advisory Board
Tourism Policy Council
Office of Policy & Planning
Office of Research
Office of the Assistant Secretary for Tourism Marketing
Office of Strategic Planning and Administration
Regional Field Offices
Office of World Fairs and International Expositions
International Congress Office

Department of Commerce
United States Travel and Tourism Administration

GENERAL STATEMENT

The United States Travel and Tourism Administration (USTTA) was established on October 1, 1981, by the National Tourism Policy Act. The mission of USTTA is to increase U.S. export earnings through trade in tourism by carrying out trade development, trade policy and statistical research programs designed to increase the American travel industry's awareness of the export market, facilitate the entry of medium and small sized American travel companies into the market, and eliminate barriers to market entry for those companies. Efforts to support this mission are carried out in three units: policy and planning, research, and tourism marketing.

The policy and planning activity initiates, directs and coordinates the formulation of domestic and international economic and trade policies and programs; identifies restrictive trade practices which act as barriers to the domestic and export growth of U.S. tourism services, supports negotiations to remove those barriers; and acts through bilateral and multilateral arrangements such as GATT, OECD, WTO and OAS to facilitate U.S. international trade in tourism. The research activity compiles economic and demographic data on international travel markets and analyzes and disseminates this data to meet the needs of public and private sector decision makers. The tourism marketing activity strengthens the export competitiveness of U.S. tourism firms, serves as a catalyst to enable the American travel industry to develop export promotion programs, and seeks to increase the number of new firms entering the international tourism export market and the number of established international tourism exporting firms entering additional markets.
The following is a comparison of the 1990 appropriation currently available with 1991 estimates and related data on current employment:

(Dollar amounts in thousands)

	Appropriation Currently Available		1991 Estimate		Inc.(+) or Dec.(-)		Perm.
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Emp. 12/31/89
Salaries and expenses...............	91	$14,122	91	$14,362	'''	+$240	86

The request for USTTA in FY 1991 is 91 permanent positions and $14,362, an increase of $240 from 1990. It is proposed that this request be funded by direct appropriation. USTTA will repropose last year's fee on commercial airlines and cruise lines, the receipts from which will offset the Department of Commerce costs of providing travel promotion services. The Administration continues to support the objective of recovering the costs of USTTA programs through a fee on those who benefit from these programs. The request is comprised of the following changes:

Highlights of 1991 Changes

The increase of $240 in FY 1991 is comprised of adjustments to base of $651 and program decreases of $411.

Economic Importance of International Tourism

International inbound travel and tourism is an important element of the Department of Commerce mission of promoting the economic security of the U.S. through growth and improved domestic and international economic competitiveness. Foreign visitors totaled 34.2 million in 1988, up over 4 million from 1987. Their travel receipts, including fare payments to U.S. carriers, reached $37.1 billion, up $7.4 billion over 1987. It is estimated that in 1989 international visitors will increase to 38 million producing $43 billion in export income for the United States. In 1990 foreign visitors to the United States will exceed 40 million generating more than $48 billion in export revenue. Expenditures by foreign visitors in this country directly supported over 500,000 jobs in 1988 with payroll of $6.7 billion. Foreign tourist-generated tax revenues totaled over $3.4 billion in 1988, of which approximately $1.5 billion was federal tax revenue. The rest was state and local tax revenue. International visitors on average stay five times longer and spend six times more than their U.S. counterparts traveling in this country. They also visit more destinations and use paid accommodations, rental cars, intercity bus, train and domestic air travel proportionately more often than domestic travelers.

The U.S. travel deficit was $2.9 billion in 1988, a decrease of 58% from the 1987 imbalance. However the United States had travel account surpluses with major trading partners with whom the country had substantial trade deficits. Canadians spent $735 million more in this country than U.S. travelers spent in Canada, and Japanese visitors spent $4.5 billion more traveling here than American travelers spent traveling to Japan. The U.S. had merchandise trade deficits of over $10 billion with Canada, and over $50 billion with Japan in 1988.

International tourism is one positive area in which the U.S. can work to offset its trade deficit. This opportunity is even more promising when we consider that the Japanese Government has adopted the policy of encouraging 10 million Japanese citizens to travel abroad by 1991 to help offset its trade imbalance. The goal is to reduce their trade surplus by $20 billion in 1991. Current estimates are that the 10 million traveler goal will be surpassed two years ahead of schedule. Many nations are competing for a share of that opportunity. Given the United States' long standing imbalance, every effort should be made to capture a large percentage of the Japanese export receipts generated through trade in tourism.

Competition for international visitors is among and between national governments. With potentially large increases in the number of outgoing visitors, a country can increase its share by well conceived, orchestrated and coordinated efforts at increasing trade development efforts by all the components of its tourism industry. While other national governments heavily fund promotion campaigns and subsidize travel service providers, the United States does neither. With limited resources, the United States through the

United States Travel and Tourism Administration provides technical assistance, economic research and trade policy support intended to stimulate the ability and facilitate the willingness of the American travel industry to work cooperatively to generate export income for the United States through trade in tourism.

For the past several years USTTA has placed major emphasis on its partnership approach to regional, state and local tourism organizations and private sector tourism companies. With its knowledge and experience in the market place, USTTA serves as a catalyst in the market to organize and coordinate cooperative travel export development programs in which U.S. travel industry organizations seek business for their destinations, attractions and events. In FY 1989, USTTA generated nearly 5,300 partners who invested $15.7 million in a broad array of cooperative trade development programs.

USTTA organizes and participates in regional, state and local tourism conferences in the U.S. designed to increase market awareness, provide technical assistance to medium and small sized suppliers entering foreign markets, and enable states and the tourism industry within them to initiate cooperative, regional tourism export development programs in foreign markets. These efforts have resulted in international tour product development projects with America's Heartland, Old West Trail, and Foremost West states. They have also led to regional, cooperative, consumer television campaigns with the New England states, and the states of California, Florida, Illinois and New York.

To compete successfully in the world's tourism market, the United States needs to continue and expand these efforts. There are signs of success. The states' spending exclusively for international tourism programs increased 36% from 1987 to 1988, from over $8 million to $11.5 million.

However, the competition is not standing still. Canada, Ireland and Australia, all of which individually invest in excess of $30 million annually in their National Government's tourism trade development programs have taken dead aim on reducing America's share of the international export travel market. They have realized and publicly acknowledged that the U.S. efforts have been limited financially and they feel that with effective, well coordinated trade development, policy and research programs they can substantially increase their share of the international travel market at the direct expense of the United States. The European Travel Commission has launched a worldwide trade development effort to increase its share and as the European Community 1992 (EC-92) approaches, the United States must be prepared for even more aggressive efforts.

A key Department of Commerce objective is to increase exports of goods and services. The U.S. current account balance has swung dramatically from a small surplus in 1982 to a $95 billion deficit in 1988. The U.S. share of the international export market has dropped 30% since the 1950's. American basic industry has lost nearly half of the global market share it commanded twenty years ago. World markets have become complicated, unpredictable, interdependent and extremely competitive. The growth of the world markets, however, presents opportunities to export U.S. goods and services. International travel is America's largest business service export, accounting for 41% of the total in this category. Programs aimed at stimulating international tourism export growth are a prime USTTA objective.

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.		Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:				
	Appropriation enacted, 1990			91	14,300
	Sequested applied, 1990				(178)
	Appropriation currently available				14,122
USTTA-10	FY 1991 Adjustments to base:				
	Adjustment for 1990 pay increase and related costs		122		
	Other cost changes		529		
	Subtotal, adjustments to base:				651
	1990 base			91	14,773

Comparison by activity:			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/Decrease Over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Int'l. tourism trade development											
USTTA-17	Tourism export develop..	Pos./BA	73	11,918	76	12,201	76	12,711	76	12,300	76	(411)
		FTE/Obl.	70	12,077		12,201		12,711		12,300		(411)
USTTA-27	Executive direction.....	Pos./BA	12	1,882	15	1,921	15	2,062	15	2,062	15	0
		FTE/Obl.	11	1,708		1,921		2,062		2,062		0
TOTAL		Pos./BA	85	13,800	91	14,122	91	14,773	91	14,362	91	(411)
		FTE/Obl.	81	13,785		14,122		14,773		14,362		(411)

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity:	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Int'l. tourism trade develop. :										
Tourism export development.										
FTE/Obl.	0	$1,189	0	1,500	0	$1,500	0	$1,500	0	0
Executive direction										
FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Total	0	1,189	0	1,500	0	1,500	0	1,500	0	0
Less offsetting receipts.										
FTE/Obl.	0	(1,189)	0	(1,500)	0	(1,500)	0	(1,500)	0	0

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increases/ (Decreases) Over 1991 Budget
	Amount	Amount	Amount	Amount	Amount
Total Obligations...........................	$14,974	$15,602	$16,273	$15,862	($411)
Financing:					
Offsetting collections from:					
Federal funds.........................	(50)	(50)	(50)	(50)	0
Trust funds..........................	0	0	0	0	0
Non-Federal sources..................	(1,139)	(1,450)	(1,450)	(1,450)	0
Recoveries.............................	0	0	0	0	0
Unobligated balance, start of year.....	0	0	0	0	0
Unobligated balance transferred........	0	0	0	0	0
Unobligated balance, end of year.......	0	0	0	0	0
Unobligated balance lapsing............	0	0	0	0	0
Reimbursable Sequester.................	0	20	0	0	0
Budget Authority......................	13,785	14,122	14,773	14,362	411
Transferred to/ from other accounts	0	178	0	0	0
Sequester					
Appropriation........................	13,785	14,300	14,773	14,362	(411)

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Perm. Pos.	Amount
ESTIMATED COST CHANGES:		
Personnel compensation		
Full-time permanent		$234
Other than full-time permanent		0
Other personnel compensation		0
Special personnel services payments		0
Total, Personnel compensation		234
Civilian personnel benefits		121
Benefits for former personnel		0
Travel and transportation of persons		11
Transportation of things		2
Rental payments to GSA		15
Rental payments to other		35
Communication, utilities and miscellaneous charges		27
Printing and reproduction		29
Others services		170
Supplies and materials		7
Equipment		0
Lands and structures		0
Investments and loans		0
Grants, subsidies and contributions		0
Insurance claims and indemnities		0
Interest and dividends		0
Refunds		0
Total		651

Department of Commerce
United States Travel and Tourism Administration
Salaries and expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

ADJUSTMENTS:

Adjustment	Activity/Subactivity	Perm. Pos.	Amount
11.G and 12.1 Personnel Compensation and Benefits			
Adjustment for 1990 pay increase and related costs:			
Total cost in FY 1990 of pay increase			+84
Less amount absorbed			-84
Anticipated FY 1990 pay increase supplemental			0
Amount in FY 1991 to provide full-year cost of pay increase			+122
Less amount absorbed			0
Subtotal, adjustment for 1990 pay increase			122

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, USTTA is absorbing the full cost of this pay increase.

Adjustment	Activity/Subactivity	Perm. Pos.	Amount
Other Cost Changes			
Adjustments for 1991 pay increases and related costs:			
Total costs in 1991 of general pay increase			+86
Less amount absorbed			-43
Subtotal, adjustment for 1991 general pay increase			43
Total cost in 1991 of SES pay increases			68
Less amount absorbed			-34
Subtotal, adjustment for 1991 SES increases			34
Total adjustment for 1991 pay increase			77

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

Adjustment	Amount
Overseas Wage and Price Increases/Contract Adjustments	+299

The increase of $299,000 for overseas wage and price increases/contract adjustments represents uncontrollable fluctuations in the exchange rate and inflation which result in mandatory increases in overseas operational costs as a result of being required to pay in local foreign currencies. Estimates were derived from projected currency and inflation increases provided by Data Resources Inc.

	Perm. Pos.	Amount
11.0 Personnel Compensation:		
Extra Compensable Day...		+17

An increase of $17,000 for the cost of one extra compensable day in 1991 compared to 1990 is calculated by dividing the 1990 estimate for personnel compensation and benefits by 261 compensable days.

12.0 Benefits:

Federal Employees' Retirement System

	Perm. Pos.	Amount
Federal Employees' Basic Benefits...		+25

The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. USTTA estimates that the percentage of payroll of eligible employees covered by FERS will rise from 38.3% in FY 1990 to 45.0% in FY 1991. This will result in an increase of $25,000.

	Perm. Pos.	Amount
Thrift Savings Plan...		+4

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The increase of $4,000 reflects the difference between the FY 1990 and FY 1991 costs associated with the employer contribution to the Thrift Savings Plan for FERS employees.

	Perm. Pos.	Amount
Civil Service Retirement System..		-13

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employee's Retirement System. USTTA estimates the percentage of payroll of employees who are covered by retirement systems will drop from 61.7% in FY 1990 to 55.0% in FY 1991. This will result in a decrease of $13,000 in the cost of CSRS contributions.

	Perm. Pos.	Amount
Federal Insurance Contributions Act (FICA):		
Old Age, Survivors, and Disability Insurance (OASDI)		+12

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax is $55,291 in FY 1990 and $67,639 in FY 1991, and the OASDI rate will increase from 6.17% in FY 1990 to 6.20% in FY 1991. This will result in an increase of $12,000.

	Perm. Pos.	Amount
Medicare		+1

All employees are subject to medicare contributions. The rate will remain at 1.45%, but the percentage of total payroll subject to FICA will increase from 83.0% for full-time permanent in FY 1990 to 86.0% for full-time permanent in FY 1991, resulting in an increase $1,000.

	Perm. Pos.	Amount
Health insurance premiums		+26

The Government's contribution to Federal employees' health insurance premiums increased by 25% effective January 1989. This increase requires an additional $26,000 calculated on the estimate presented in the FY 1990 Budget.

	Perm. Pos.	Amount
Employees' Compensation Fund		+2

The increase in the repayment to the Employees Compensation Fund is the result of higher cost in the period ending June 30, 1989, than in the year ending June 30, 1988. The 1989 charges will be reimbursed to the Department of Labor, Employees Compensation Fund. This amount will result in an increase of $2,000.

	Perm. Pos.	Amount
23.1 Rental payments to GSA		+15

The GSA estimates a 2.39 percent increase based on GNP projections for 1990 for currently occupied space. The estimate of $331,000 for FY 1990 rent payments was subtracted from the FY 1991 base of $346,000 for an increase of $15,000.

		Perm. Pos.	Amount
23.3	Communications, utilities and other rent:		
	Federal Telecommunications System (FTS)		+7
	An increase of $7,000 represents 4.0% of the revised 1990 base for an adjusted 1991 cost less the 1990 Congressional estimate of $45,000.		
	FTS 2000		-15
	Following implementation of FTS-2000, GSA anticipates lower rates charges for telephone services.		
24.0	Printing		+44
	Cost for printing and binding has increased due to an increase in labor, paper and commercial procurement prices. In FY 1989 an ATB of 4% was given. The increase to 7% provides an additional ATB in the amount of 18,960 based on the budget submitted. In FY 1990 an ATB of 7% is requested to provide for the increased cost. This adjustment represents an increase of $44,000.		
25.0	Other services:		
	Working Capital Fund		+28
	The estimated increase of $28,000 provides inflationary cost increases in the Departmental Working Capital Fund to maintain the current level of operations. These include items such as within-grade step increases, rent payments to GSA, payroll costs, and other adjustments which are beyond the control of the Department.		
	Other Services		-5
	Maintenance of equipment decreases in 1991 due to replacement of old equipment with higher repair costs in 1990.		
26.0	Supplies and Materials		+5
	The $5,000 increase represents 4.0% of the 1990 Congressional estimate of $119,000.		
Total, Adjustments-to-Base			+651

Appropriation Language and Code Citation

1. "For necessary expenses of the United States Travel and Tourism Administration..."

16 U.S.C. 18
22 U.S.C. 2121-2127

16 U.S.C. 18 requires the "Secretary of Commerce to cooperate ...in the collection, publication, and dissemination of information with respect to places of interest, ...for the purpose of encouraging, promoting, or developing such travel. Nothing shall prohibit ...materials in foreign languages..."

22 U.S.C. 2121-2127 provides that "...the Secretary of Commerce shall...develop, plan and carry out a comprehensive program designed to stimulated and encourage travel to the United States by residents of foreign countries..."

2. "including employment of American citizens and aliens by contract for services abroad;"

No Specific Authority

44 CG 761, OPM guidance, and House Report 89-188 have concluded that Federal agencies must have specific authority to employ personnel by contract. In order to present its overseas exhibitions USTTA often requires the use of receptionists, clerical, procedures; or who only need to be employed for a short period of time. In some cases, however, it is more advantageous to employ U.S. citizens in the host country because they have greater familiarity with American methods and, therefore, require less effort to train.

3. "rental of space abroad for periods not exceeding five years, and expenses of alteration, repair, or improvement;"

No Specific Authority

40 U.S.C. 278a prohibits expenditures for building rental if the rent is more than 15 percent over the fair market value of the premises and prohibits expenses for alterations, improvements, and repairs of rented premises which exceed 25 percent of the rent.

Buildings, pavilions, and space in such structures must be rented for exhibitions. Rental terms are established by fair authorities and may or may not exceed the percentage provision in 40 U.S.C. 278a. Without this waiver, the program may be prohibited form exhibiting at certain fairs which support USTTA's tourism development objectives.

4. "payment of tort claims in the manner authorized in the first paragraph of 28 U.S.C. 2672, when such claims arise in foreign countries;"

No Specific Authority

28 U.S.C 2672 provides for settlement of tort claims for money damages of $2,500 or less against the United States by the head of each Federal agency for loss of property or personal injury or death caused by a negligent or wrongful act of any private person, would be liable under local law. However, 28 U.S.C. 2680 exempts the settlement of tort claims which arise abroad from the provisions of 28 U.S.C. 2672.

5. "and not to exceed $12,000 for representation expenses abroad;"

No Specific Authority

5 U.S.C. 5536 prohibits additional pay or allowance to employees unless the appropriation therefore specifically states that it is or the additional pay or allowance.

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) From 1991 Base	
	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Tourism export development										
Pos/BA FTE/Oblig.	73	$12,077	76	$12,201	76	$12,711	76	$12,300	0	-$411
Total	73	12,077	76	12,201	76	12,711	76	12,300	0	-411

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: REIMBURSABLE AGREEMENT
(Dollar amounts in thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) From 1991 Base	
	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Tourism export development										
Pos/BA	0	$1,189	0	$1,500	0	$1,500	0	$1,500	0	0
FTE/Oblig.										
Total	0	1,189	0	1,500	0	1,500	0	1,500	0	0

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amount in thousands)

Activity: International tourism trade development
Subactivity: Tourism export development

Goals and Objectives for FY 1991

Goals:

The goal of tourism export development is to increase U. S. export earnings through trade in tourism.

Objectives:

The objectives of this subactivity are to encourage the U.S. travel and tourism industry to expand its international trade efforts to increase U.S. export earnings through trade in tourism; expand international markets by removing or reducing barriers and impediments to international trade in tourism; increase the number of medium and small-sized firms involved in the international travel export market; and provide accurate and timely market research and economic data on international travel markets to international travel exporters. Other objectives are to provide medium and small-sized businesses with the market intelligence, counseling and training necessary to develop their international tourism export marketing programs; and to encourage and sponsor additional involvement by regional organizations, state and local governments in international tourism export development efforts through seminars, workshops and other forms of technical assistance.

The benefits of achieving these objectives is seen in additional job creation, reduction in the balance of payments deficit, increased tax revenues, greater peace and understanding among people, better care of the environment, improved educational opportunities and improvement in our quality of life.

Base Program

To meet its goals and objectives, USTTA develops pertinent international trade information on numerous export development opportunities for the American travel industry and provides counseling and training on these opportunities for the U.S. and international tourism business community. USTTA develops and makes available to the private sector as well as regions, state and local governments, a wide variety of tourism export development programs, designed to meet planning and marketing needs of industry users and achieve the ultimate aim of increasing U.S. international tourism exports.

HEADQUARTER'S STAFF SUPPORT (Personnel 25; $1,592)

In support of USTTA goals and objectives, USTTA headquarters staff plans and coordinates the use of resources to implement trade development, trade policy and economic research programs and to support staff abroad.

Marketing Staff-(Personnel 15; $987)
The Office of the Assistant Secretary for Tourism Marketing is responsible for establishing, implementing and supervising the agency's tourism trade development program. This office is also responsible for the development and implementation of cooperative trade development programs with U.S. regions, states, cities, and the travel industry. The office of the Assistant Secretary establishes and maintains working relationships with U.S. tourism groups to enlist cooperative partners, provide technical assistance and training to the U.S. travel trade, and holds trade development conferences aimed at coordinating U.S. trade development in key foreign markets. The office conducts program reviews to assess and direct USTTA activities abroad. The marketing staff is also responsible for training, career development, financial management, and liaison with other segments of USTTA and Departmental program elements as well as for building a highly motivated, well-trained corps of tourism-oriented career officers for regional office operations. These foreign service officers were selected in FY 1989 as a result of a rigorous assessment process. Candidates were tested for their commercial travel trade and management experience as well as their intercultural and interpersonal skills. This office is also responsible for developing, organizing and coordinating the Federal government's role in and promotion of international fairs, expositions and special events, and international sporting events held in the United States. USTTA coordinates all Commerce Department efforts involving the Bureau of International Expositions (BIE) including counseling potential U.S. fair organizers on BIE application procedures, reviewing private sector applications for compliance with BIE regulations, and making recommendations to the Secretary on the viability and feasibility of individual projects.

Research Staff-(Personnel 6; $329)
The Office of Research provides staff support and develops economic and marketing data required for program planning and evaluation in the public and private sector; develops market analyses in direct support of Departmental and agency objectives and strategies; provides planning input for, undertakes necessary research in support of, and advises on the direction and content of programs contained in the agency's regional trade development plans; carries out tracking and periodic evaluation studies to assess the relative effectiveness of USTTA's trade development programs; forecasts trends in international tourism; maintains a data bank of international travel information; and services numerous travel industry requests for technical assistance and research information each year.

Policy Staff-(Personnel 4; $276)
The Office of Policy and Planning is responsible for the development of domestic and international tourism trade policies, legislative initiatives, and planning functions, including preparation of position papers on tourism industry issues, legislative proposals and related analyses, comments, and testimony. It provides staff support to the Tourism Policy Council and the Travel and Tourism Advisory Board. The office interacts with other governmental policy offices, intergovernmental organizations and the travel trade. It also develops policy and planning strategies in the area of international travel and tourism agreements; represents global U.S. trade in tourism policy interests, with particular emphasis on obtaining improved access for U.S. tourism efforts; represents the United States as an official participant at international meetings; and conducts bilateral and multilateral negotiations with other national governments to reduce or eliminate impediments to international trade in tourism. The office identifies policy options to improve the market climate in which the U.S. travel industry must operate. The office analyzes the impact legislation and regulations proposed within and outside the United States will have on the American travel industry.

REGIONAL OFFICE OPERATIONS (Personnel 51; $10,019)

Regional office operations abroad directly support USTTA goals and objectives to increase U.S. export earnings through trade in tourism and to increase the number of medium and small-sized firms participating in the international travel market. These regional offices were established to carry out Department of Commerce programs for the direct benefit of the U.S. economy and the U.S. tourism industry. USTTA has offices in nine countries; one domestic office in Miami, Florida, to service five South American countries and contract representation to service three Far East countries. Regional offices also operate cooperative travel development, technical assistance, and educational programs in 11 other countries in cooperation with the U.S. and Foreign Commercial Service and local VISIT USA Committees. In total, these primary and secondary markets provide over 85% of all international visitors to the U.S. and 79% of U.S. tourism export earnings. The regional offices develop and implement cooperative trade development and support programs which stimulate international trade in tourism to all areas of the U.S. These programs are developed with the cooperation and input of Visit USA Committees in each market which consist of U.S. and foreign travel industry marketing representatives who provide the public and private sector support for USTTA's export development programs. Cooperative programs may include cooperative advertising, journalist and travel trade familiarization tours, market development travel missions, tour development travel trade shows, media events, and marketing workshops and seminars for the travel industry. Cooperative support programs may include the development of informational travel brochures and displays, consumer and trade information services, maintenance of film and video libraries, photo libraries, and reference library material. These programs stimulate demand for U.S. tourism products. Informational materials are distributed through regional office consumer and trade information centers by trained market specialists and information counselors. These counselors educate and motivate the foreign-based wholesale and retail industry to increase their efforts in behalf of international tourism export development to the United States while providing travel information to consumers and retail travel agents.

POLICY PROGRAM ($0)

This program area conducts activities contributing to the following major objectives: supporting bilateral and multilateral representations focused on reducing trade barriers to U.S. tourism exports; initiating and supporting activities on tourism trade issues that arise in international forums such as GATT, OECD, OAS and WTO to facilitate U.S. tourism exports; coordinating international transportation policy initiatives with the Departments of State and Transportation, particularly with regard to U.S. civil aviation bilateral negotiations; providing support to the U.S. Trade Representative in conducting and implementing results of trade negotiations in tourism services; developing a U.S. policy response to EC- 92 programs, directives and regulations; and implementing the tourism provisions of the U.S.-Canada Free Trade Agreement, U.S. bilateral tourism agreements and other country specific policy arrangements.

USTTA's trade policy program coordinates development of domestic and international tourism policy and legislative initiatives with the travel industry, the Congress and with other Federal agencies, including other units of the Department of Commerce. The program identifies policy options to improve the economic and political climate in which the U.S. travel industry must operate. It analyzes the impact legislation and regulations proposed within and outside the United States will have on the American travel industry. It also supports the Under Secretary by preparing planning documents, position papers, and policy speeches.

The tourism policy program identifies foreign government-imposed impediments to international travel and represents the United States in bilateral and multilateral negotiations aimed at reducing or removing these barriers. Major impediments include exchange controls limiting the amount of currency a traveler may take out of his home country to pay for travel services obtained abroad; excessive passport fees and departure taxes; restrictions which prohibit individuals of a certain age from traveling abroad; non-interest-bearing bank deposit requirements for nationals seeking to travel abroad; exit visa requirements; and arbitrary limits on transportation capacity to and from U.S. foreign travel markets.

USTTA also administers bilateral tourism agreements between the U.S. and foreign countries and coordinates the national Tourism Policy Council. Mandated by the National Tourism Policy Act, the interagency council (1) coordinates the policies and programs of Federal agencies that have a significant effect on tourism, recreation, environmental quality, economic development, transportation, and national heritage preservation; (2) identifies areas of cooperation between Federal agencies and the programs they administer; (3) assists in resolving interagency policy and program conflicts; and (4) seeks and considers industry, state and local government concerns about Federal policies which conflict with the orderly growth and development of tourism. USTTA also encourages state and local governments to adopt tourism policies to facilitate the growth of America's tourism industry.

Policy also coordinates Federal aviation, transportation, cultural and historic preservation, recreation, and international trade policies as they relate to the National Tourism Policy. USTTA leads U.S. Government delegations at multilateral international negotiations affecting international trade in tourism.

RESEARCH PROGRAM ($860)

USTTA's research program develops economic and marketing data required for program planning and evaluation in the public and private sector of the U.S. tourism industry; develops market analyses in direct support of Departmental and agency objectives and strategies; provides planning input for, undertakes necessary research in support of, and advises on the direction and content of trade development programs contained in the Agency's regional marketing plans; carries out tracking and periodic evaluation studies to assess the relative effectiveness of USTTA's trade development programs; forecasts trends in U.S. international tourism; maintains a statistical data bank of international travel industry information; and services numerous travel industry requests for technical assistance and research information each year.

USTTA gathers, analyzes, and provides comprehensive, timely data on international travel market economic activity to public and private sector marketing and policy planners. Major components of the USTTA research program include:

USTTA Survey of International Air Travelers - ($453)

Initiated in FY 1982, the In-Flight Survey (IFS) gathers essential marketing information from U.S. and foreign travelers departing the United States. This survey requires the cooperative support of major international air carriers and U.S. international airport authorities. USTTA finances this program in part through user fees, subscriptions, and interagency funding. Besides providing comprehensive analyses of visitor characteristics, travel patterns and spending habits, the survey is used to upgrade the Commerce Department's data on the U.S. international travel dollar accounts. OMB has mandated that BEA use the traveler expenditure data generated by this survey for estimating U.S. international travel receipts and payments (in the balance of payments accounts). Using the In-Flight Survey data, the Bureau of Economic Analysis (BEA) figures for foreign visitor spending in the U.S. were revised upward by over $12 billion for 1988, and the chronic international travel dollar deficit was revised downward by nearly $5 billion. Notwithstanding this important use, the travel industry relies heavily on the IFS. Annual reports are issued to subscribers on inbound and outbound market characteristics. Special analyses and user tapes are provided to major sponsors and individual purchasers as requested.

Basic Foreign Travel Statistics - ($112)

USTTA collects two types of basic data on international travelers. The first is a monthly count of non-immigrant foreign visitor arrivals by country of residence. Derived from INS Form I-94, the data is collected by the Immigration and Naturalization Service (INS) on inbound visitors only to the U.S. This report provides the basic information on numbers of foreign visitors traveling to the U.S. from various countries. USTTA releases to paying subscribers quarterly reports of this data. USTTA receives these reports on a monthly basis from INS and analysis them to determine the number of visitors by country of residence, port of entry, mode of transportation, and type of visa. These data provide a base-line measurement on U.S. tourism export activities.

The second tracks air arrivals and departures of aliens and U.S. citizens by point of origin and destination. These data are derived from the INS Form I-92 on a flight by flight basis. The information, processed and published by the Department of Transportation (DOT), provides critical support for the In-Flight Survey. It is used to weight the In-Flight Survey sample up to the known universe. In addition, it is the only source of data available on international travel patterns and volumes of outbound U.S. citizens. It also provides a means for analyzing U.S. international carriers' competitive performances against foreign carriers in individual foreign markets.

Cosponsored Consumer Surveys - ($225)

In-country consumer surveys are jointly-sponsored by USTTA and the Canadian Government. Sale of survey reports and sponsorship by U.S./foreign travel industry organizations help fund the studies. The annual cost of the surveys is about $550 thousand, of which USTTA provides $225 thousand , Tourism Canada $225,000 and other, non-Federal sponsors, $100 thousand. The studies establish U.S. competitive positioning, potential travelers' characteristics, prime target market segments, and their images, attitudes, and international travel preferences. Data from these surveys guide development of U.S. public and private sector cooperative programs in the countries studied.

Marketing Program Evaluation Studies - ($70)

Program evaluation studies track and assess the effectiveness and impact of selected USTTA marketing programs. These studies include pre- and post-campaign consumer surveys, coupon conversion studies, tracking of changes in visitation patterns of specific target market groups, and follow-up surveys of cooperative trade show and seminar attendees.

WORLD FAIRS AND EXPOSITIONS-($0)

USTTA develops, organizes, and coordinates the Federal Government's role in and promotion of international fairs, expositions, special events, and international sporting events which take place in the U.S. USTTA coordinates all Department of Commerce efforts involving the BIE including counseling potential U.S. fair organizers on BIE application procedures, reviewing private sector applications for compliance with BIE regulations, and making recommendations to the Secretary of Commerce on the viability and feasibility of individual city's submissions to BIE for World's fair/exhibition recognition. USTTA will develop an international cooperative trade development strategy to support the 1992 Christopher Columbus Quincentennial and the 1994 World Cup Soccer Tournament both to be held in the U.S.

MULTILINGUAL RECEPTIONIST ($240)

This cooperative program is supported by USTTA, The Department of Education, airport, city and county authorities . USTTA's portion of funding represents 16 percent of the total amount spent on this program. The multilingual receptionist program now operating at 12 major U.S. airports provides assistance and interpreting service to non-English speaking international visitors. The receptionists are stationed in Federal inspection areas and work closely with the Immigration and Naturalization Service, the Customs Service and the Department of Agriculture to expedite the entry of foreign visitors.

Summary of Workload and Performance Data

	FY 1988 Actual	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Number of cooperative partners	4,725	5,258	3,905	4,355
Dollars invested by cooperative tourism export partners	14,028,169	15,680,621	11,595,000	16,900,000
Number of journalist familiarization tours	458	356	333	520
Number of travel trade missions	90	89	71	78
Number of travel mission participants	2,192	1,269	1,057	1,950
Number of workshops and seminars held by regional offices	101	116	101	117
Number of trade participants in workshops and seminars	16,317	17,210	14,650	18,200
Number of consumer requests for information	403,852	435,174	450,500	611,000
Number of trade requests for information	176,406	187,662	179,800	221,000
Number of tourism agreements administered	4	5	6	8
Number of bilateral and multilateral negotiations held	3	4	5	6
Number of research reports provided	212	213	254	250
Number of trade requests for research information	8,900	10,000	11,500	11,500
Number of cooperative research participation	2	4	5	10
Dollars invested by research partners	485,000	750,000	1,000,000	1,150,000

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
DECREASES FOR 1991
(Dollar amounts in thousands)

	1991 Base		1991 Estimate		Decrease	
	Personnel	Amount	Personnel	Amount	Personnel	Amount
Tourism export development	76	$12,711	76	$12,300	0	-$411

MARKET TRADE DEVELOPMENT PROGRAMS - (Personnel 0; -$411)

The decrease of $411 represents a reduction in cooperative consumer advertising. It is anticipated that USTTA will generate larger returns of private funding for every USTTA dollar. Therefore, USTTA will require less cooperative consumer advertising funding based on the expected returns.

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Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: International tourism trade development
Subactivity: Tourism export development
Program Decrease: Tourism export development programs

Object Class		1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	
11.3	Other than full-time permanent	
11.5	Other personnel compensation	
11.8	Special personnel services payments	
11.9	Total personnel compensation	
12.1	Civilian personnel Benefits	
13	Benefits for former personnel	
21	Travel and transportation of persons	
22	Transportation of things	
23.1	Rental payments to GSA	
23.2	Rental payments to others	
23.3	Communication, utilities and miscellaneous charges	
24	Printing and reproduction	
25	Other services	(411)
26	Supplies and materials	
31	Equipment	
32	Lands and structures	
33	Investments and Loans	
41	Grants, subsidies and contributions	
42	Insurance claims and indemnities	
43	Interest and dividends	
44	Refunds	
99	Total	(411)

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in the thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Executive direction										
Pos/BA	12	$1,708	15	$1,921	15	$2,062	15	$2,062	0	0
FTE/Oblig.										
Total......................	12	1,708	15	1,921	15	2,062	15	2,062	0	0

DEPARTMENT OF COMMERCE
United States Travel and Tourism Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: International tourism trade development
Subactivity: Executive direction

Goals and Objectives for FY 1991

Goals:

The goal of USTTA executive direction is to direct and administer the Agency's efforts to stimulate U.S. export earnings through international trade in tourism to the United States.

Objectives:

The objectives of this function are to: (1) develop and implement managerial policies; (2) provide strategic and tactical direction to USTTA trade development, trade policy and statistical research programs; (3) provide effective administrative support of agency operations; and (4) represent USTTA before the Congress, Federal agencies and other governmental and private sector organizations.

Base Program

USTTA's executive direction is provided by the Office of the Under Secretary and the Office of Strategic Planning and Administration. Together these offices provide strategic and administrative guidance and support to headquarters and foreign operations. Resources required for centralized services are also provided in this subactivity.

HEADQUARTERS STAFF (Personnel 15; $833)

Office of the Under Secretary - (Personnel 7; $534)
The Under Secretary of Commerce for Travel and Tourism is responsible for the management and leadership of USTTA. The Under Secretary exercises the duties and responsibilities of the Secretary under the International Travel Act of 1961, as amended by the National Tourism Policy Act of 1981, and other authorities as delegated by the Secretary. The Under Secretary provides leadership at the national level to

focus the attention and efforts of private, state and local tourism officials on increasing U.S. export earnings through international trade in tourism. The Under Secretary for Travel and Tourism is responsible for directing USTTA activities including Executive branch coordination, regional/state/city /industry/ intergovernmental coordination and liaison, public relations support, and policy direction for the Travel and Tourism Advisory Board and Tourism Policy Council

Office of Strategic Planning and Administration - (Personnel 8; $299)
The Office of Strategic Planning and Administration serves as the primary administrative arm of the Office of the Under Secretary, the Assistant Secretary for Tourism Marketing and the USTTA Foreign Service. The office is responsible for the effective development of the agency's strategic plan and the operation of USTTA's financial, administrative and personnel management programs. It also serves as the USTTA representative to numerous Department of Commerce organizations and other agencies.

CENTRALIZED SERVICES ($1,229)

Centralized services consist of accounting, personnel, and administrative support furnished by the Department of Commerce to USTTA offices located in Washington. These services include GSA space rental, postal charges to USPS, telephone services, FTS, equipment rental, general administrative printing, office supplies, ADP services and equipment.

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	$4,273	4,273	0
11.3	Other than full-time permanent	30	30	0
11.5	Other personnel compensation	46	46	0
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	4,349	4,349	0
12.1	Civilian personnel Benefits	1,257	1,257	0
13	Benefits for former personnel	0	0	0
21	Travel and transportation of persons	427	427	0
22	Transportation of things	58	58	0
23.1	Rental payments to GSA	346	346	0
23.2	Rental payments to others	977	977	0
23.3	Communication, utilities and miscellaneous charges	664	664	0
24	Printing and reproduction	452	452	0
25	Other services	5,998	5,587	-411
26	Supplies and materials	136	136	0
31	Equipment	68	68	0
32	Lands and structures	0	0	0
33	Investments and Loans	0	0	0
41	Grants, subsidies and contributions	41	41	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total	14,773	14,362	-411

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Personnel Data	1991 Base	1991 Estimate	Increase/ (Decrease)
Full-Time Equivalent Employment:			
Full-time permanent	91	91	0
Other than full-time permanent	0	0	0
Total	91	91	0
Authorized Positions:			
Full-time permanent	91	91	0
Other than full-time permanent	0	0	0
Total	91	91	0

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level	$83	$83	$0
Senior executive service	408	408	0
General schedule	2,565	2,565	
Commissioned officers	0	0	0
Wage board/wage marine	0	0	0
Scientific & professional (P.L. 80-313)	0	0	0
Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
Examiners of trademark appeals (P.L. 98-622)	0	0	0
Senior foreign service	0	0	0
Foreign service staff	0	0	0
Foreign service nationals	1,217	1,217	0
Consultants & experts	0	0	0
Students	0	0	0
Subtotal	4,273	4,273	0
11.3 Other than full-time permanent			
General schedule	25	25	0
Wage board	0	0	0
Experts & consultants	5	5	0
Hourly	0	0	0
Subtotal	30	30	0

	1991 Base	1991 Estimate	Increase/ (Decrease)
11.5 Other personnel compensation			
Overtime	10	10	0
SES performance awards	5	5	0
Cash awards	8	8	0
Merit pay awards	23	23	0
Other	0	0	0
Subtotal	46	46	0
11.8 Special personnel services payments			
Foreign service officers (State)	0	0	0
Other	0	0	0
Subtotal	0	0	0
11.9 Total personnel compensation	4,349	4,349	0
12.1 Civilian personnel benefits			
Civil Service retirement	69	69	0
Federal employees' retirement	197	197	0
Thrift savings plan	34	34	0
Federal insurance contribution act	85	85	0
Health insurance	130	130	0
Life insurance	11	11	0
Employees' compensation fund	5	5	0
Other	726	726	0
Subtotal	1,257	1,257	0

	1991 Base	1991 Estimate	Increase/ (Decrease)
13 Benefits for former personnel			
Severance pay	0	0	0
Unemployment compensation	0	0	0
Other	0	0	0
Subtotal	0	0	0
21 Travel and transportation of persons			
Common carrier	156	156	0
Mileage	20	20	0
Per diem/actual	241	241	0
Vehicular	5	5	0
Other	5	5	149
Subtotal	427	427	0
22 Transportation of things	58	58	0
23.1 Rental payments to GSA	346	346	0
23.2 Rental payments to others	977	977	0
23.3 Communications, utilities and-miscellaneous charges			
Rental of ADP equipment	0	0	0
Rental of office copying equipment	56	56	0
Other equipment rental	15	15	0
Federal telecommunications system	52	52	0
Other telecommunications services	279	279	0
Postal Service by USPS	58	58	0
Other	204	204	0
Subtotal	664	664	0

		1991 Base	1991 Estimate	Increase/ (Decrease)
24	Printing and reproduction			
	Publications	388	388	0
	Public use forms	2	2	0
	Envelopes	12	12	0
	Other	50	50	0
	(Payments to GA, WCF)	0	0	0
	Subtotal	452	452	0
25	Other services			
	Training:			
	University	0	0	0
	Office of Personnel Management	5	5	0
	Other	15	15	0
	Maintenance of equipment	25	25	0
	GSA reimbursable services	16	16	0
	ADP services	6	6	0
	Telecommunications services	4	4	0
	Payments to GA, WCF	470	470	0
	Other non-government contracts	4.272	3,861	-411
	Other	1,144	1,144	0
	Subtotal	5,957	5,546	-411

		1991 Base	1991 Estimate	Increase/ (Decrease)
26	Supplies and materials			
	Office supplies	101	101	0
	ADP supplies	23	23	0
	Other	12	12	0
	Subtotal	136	136	0
31	Equipment			
	Office machines and equipment	8	8	0
	ADP hardware	52	52	0
	ADP software	8	8	0
	Other	0	0	0
	Subtotal	68	68	0
32	Lands and structure	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	41	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
	Subtotal	41	41	0
99	Total	14,773	14,362	-411

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses

Average Grades and Salaries

	1989 Actual	1990 Estimate	1991 Estimate
Average ES Salary	73,833	74,860	81,660
Average GS Grade	11.20	11.43	11.43
Average GS Salary	46,617	46,096	$48,964
Average Salary of Ungraded Positions	33,257	37,726	$39,262

Mr. EARLY. Here to testify in support of this budget request is Rockwell Schnabel, Under Secretary for Travel and Tourism.

Since this is your first appearance before the committee, we will insert your biographical sketch in the record at this point, and then you may proceed with your statement.

[The biography of Mr. Schnabel follows:]

BIOGRAPHY OF ROCKWELL A. SCHNABEL, UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM

Rockwell A. Schnabel is Under Secretary of Commerce for Travel and Tourism. The Former U.S. ambassador heads the United States Travel and Tourism Administration. He completed a three year tour of duty as the United States ambassador to Finland in February 1989 and has been associated with the Department of Commerce since that time.

The United States Travel and Tourism Administration (USTTA) is the agency responsible for increasing U.S. export earnings through trade in tourism. With headquarters in Washington, D.C., USTTA maintains offices in ten major international cities and establishes this nation's international tourism policies and trade development programs.

Born in Amsterdam, The Netherlands in 1936, Schnabel relocated to the United States in 1957 and became a U.S. citizen. He served in the U.S. Air National Guard.

An international investment banker, he joined Bateman Eichler, Hill Richards, Inc., Los Angeles, in 1959, where he held various senior management positions including president of the firm's holding company, Bateman Eichler, Hill Richards Group, Inc. From 1975 to 1979 he was president of Unilife Assurance Group, Luxembourg, and from 1983 to 1985 he was deputy chairman of the board of Morgan, Olmstead, Kennedy & Gardner, Inc. (now Wedbush Morgan Securities), in Los Angeles.

Prior to government service he was active in a number of civic, political, professional and cultural organizations in Los Angeles. He was a founder of Citizens for America, a national civic league, and was active in the Los Angeles Olympic Organizing Committee for the '84 Games serving as the envoy to The Netherlands. He was awarded the Medal of Honour by The Netherlands Olympic Committee and a Gold Medal by the Dutch government. Schnabel was also granted the decoration of Commander, Grand Cross of the Lion of Finland by the president of Finland.

Schnabel is married to the former Marna Del Mar. They have three children.

SUMMARY STATEMENT

Mr. SCHNABEL. Thank you, Mr. Chairman. Good morning.

The Administration's proposed budget for the United States Travel and Tourism Administration for Fiscal Year 1991 is $14,362,000. This proposal is $240,000 more than the FY 1990 appropriation for the agency.

For the first time in many years, the budget requests appropriated funding for USTTA. This funding will enable USTTA to work with the industry to promote travel to the United States.

The Administration will be transmitting shortly, a proposal which would assess a fee on commercial airlines and cruise lines who directly benefit from the USTTA's activities. These fee revenues will help reduce the Federal budget.

The travel and tourism industry is extremely diverse with numerous components comprising the largest service industry in the world. In fact, according to a recent study by American Express, the total size of the industry worldwide is two trillion dollars, employing some 100 million people in the world, one in 16, in the work force.

In the United States, the industry is the second largest employer next to health services, directly employing approximately six million people, and the size of the U.S. travel and tourism industry is $350 billion, or $1 billion a day.

I hear these numbers, and I am amazed that this industry still suffers from a serious lack of recognition both within its own ranks and externally. While we have been making some strides through the work of the National Tourism Awareness Council and National Tourism Week, there is much more to be done to position the travel and tourism industry where it belongs with appropriate recognition and awareness of the tremendous economic contribution that it makes.

Recent performance of the inbound market is definitely helping efforts. This nation achieved a very significant milestone in 1989, during which the United States enjoyed a travel surplus of some $450 million for the first time, as foreigners spent more money visiting the U.S. than U.S. citizens spent traveling abroad. Globally, the industry is booming, and we are doing our best to increase our market share of these valuable travelers as the world's destinations become more and more competitive.

During 1989, some 38 million people visited the United States, spending a total of $43 billion, which made it the number one export in this country. With the 1991 request, USTTA proposes to do the following:

One, develop and implement integrated cooperative travel export promotion programs in nine primary and 16 special markets abroad.

Two, conduct regional, state, and local tourism market planning and private development seminars. Areas in rural America will be included in this educational type of program.

Three, coordinate the Federal Government's role in supporting and marketing major international events to be held in the United States, which will have a significant impact on America's export earnings from trade and tourism, such as the World Soccer Games that are coming to the United States.

Number four, collect, analyze and disseminate accurate and timely economic and consumer behavior data on America's foreign travel markets, and work on improving the statistics.

Number five, identify and attack foreign and domestic impediments to international trade in tourism through legislation, bilateral and multilateral negotiations, and coordinate national tourism policy through the Commerce Secretary's Tourism Policy Council and the Travel and Tourism Advisory Board.

And as we look into the future, we can see many opportunities for the industry. We are very fortunate to live in an era of reduced political tensions worldwide, which should enhance international travel.

We predict that soft adventure travel such as rafting, trips to our national parks, and dude ranches will all benefit from these travelers. The cultural and educational component to travel will also be very important in the future.

Mr. Chairman, that concludes my brief remarks. And I would be very happy to answer any of your questions.

[The statement of Mr. Schnabel follows:]

TESTIMONY OF THE
HONORABLE ROCKWELL A. SCHNABEL
UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM
BEFORE
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, STATE, JUSTICE AND RELATED AGENCIES

9:30 A.M.

FEBRUARY 28, 1990

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE.

THE ADMINISTRATION'S PROPOSED BUDGET FOR THE UNITED STATES TRAVEL AND TOURISM ADMINISTRATION (USTTA) FOR FISCAL YEAR 1991 IS $14.362 MILLION. THIS PROPOSAL IS $240 THOUSAND MORE THAN THE FY 1990 CONGRESSIONAL APPROPRIATION FOR THE AGENCY.

FOR THE FIRST TIME IN MANY YEARS, THE 1991 REQUEST INCLUDES FUNDING FOR USTTA TO WORK WITH INDUSTRY TO PROMOTE TRAVEL TO THE UNITED STATES.

AS IT HAS FOR THE PAST THREE YEARS, THE ADMINISTRATION WILL ASK CONGRESS TO ESTABLISH A FACILITATION FEE. WE WILL BE TRANSMITTING SHORTLY A LEGISLATIVE PROPOSAL WHICH WOULD ASSES A FEE ON COMMERCIAL AIRLINES AND CRUISE LINES.

THE TRAVEL INDUSTRY

THE TRAVEL AND TOURISM INDUSTRY IS EXTREMELY DIVERSE WITH NUMEROUS COMPONENTS COMPRISING THE LARGEST SERVICE INDUSTRY IN THE WORLD. IN FACT, ACCORDING TO A RECENT STUDY BY AMERICAN EXPRESS, TOURISM IS A TWO TRILLION DOLLAR INDUSTRY WORLDWIDE, EMPLOYING 100 MILLION PEOPLE OR ONE OUT OF EVERY 16 PEOPLE IN THE WORLD'S WORKFORCE.

IN THE U.S. THIS INDUSTRY IS THE SECOND LARGEST EMPLOYER (FOLLOWING HEALTH SERVICES), DIRECTLY EMPLOYING NEARLY 6 MILLION PEOPLE. DOMESTIC AND FOREIGN TRAVELERS TOGETHER SPENT $350 BILLION DOLLARS IN THE UNITED STATES LAST YEAR, MAKING TRAVEL AND TOURISM THE THIRD LARGEST RETAIL BUSINESS IN THE COUNTRY. TOURISM IS A BILLION DOLLAR-A-DAY INDUSTRY!

I HEAR THESE NUMBERS AND I AM ASTOUNDED THAT THIS INDUSTRY STILL SUFFERS FROM A SERIOUS LACK OF RECOGNITION, BOTH WITHIN ITS OWN RANKS, AND EXTERNALLY. WHILE WE HAVE BEEN MAKING STRIDES THROUGH THE WORK OF THE NATIONAL TRAVEL AND TOURISM AWARENESS COUNCIL AND NATIONAL TOURISM WEEK, THERE IS MUCH MORE TO BE DONE TO POSITION THE TRAVEL AND TOURISM INDUSTRY WHERE IT BELONGS WITH APPROPRIATE RECOGNITION FOR ITS TREMENDOUS ECONOMIC CONTRIBUTION.

RECENT PERFORMANCE OF THE INBOUND MARKET IS CERTAINLY HELPING IN THIS EFFORT. THIS NATION ACHIEVED A VERY SIGNIFICANT MILESTONE IN 1989. THE U.S. ENJOYED A

TRAVEL SURPLUS, AS FOREIGNERS SPENT MORE MONEY VISITING THE U.S. THAN U.S. CITIZENS SPENT TRAVELING ABROAD. GLOBALLY, TOURISM IS BOOMING, AND WE'RE DOING OUR BEST TO INCREASE OUR MARKET SHARE OF THESE VALUABLE TRAVELERS AS THE WORLD'S DESTINATIONS BECOME MORE AND MORE COMPETITIVE. AND I AM PROUD TO SAY, WE ARE SUCCEEDING. THE U.S. SHARE CONTINUES TO GROW.

IN 1989, 38 MILLION VISITORS CAME TO THE U.S. AND SPENT A RECORD $43 BILLION. THIS MADE TOURISM OUR LARGEST EXPORT ITEM, SURPASSING EVEN AGRICULTURAL EXPORTS, WHICH TOTALED $40.6 BILLION. IN 1990, U.S. EXPORT INCOME THROUGH TRADE IN TOURISM IS ANTICIPATED TO GROW TO OVER $48 BILLION. FURTHER, USTTA IS FORECASTING THAT U.S. RECEIPTS FROM TRADE IN TOURISM IN 1991 WILL REACH $54 BILLION. BY THE YEAR 2000, INBOUND TOURISM WILL NEARLY DOUBLE TO 67 MILLION VISITORS OR 13% OF ALL INTERNATIONAL TRAVELERS GOING ANYWHERE. BY THE TURN OF THE CENTURY, THESE VISITORS WILL CONTRIBUTE AROUND $89 BILLION (IN 1989 DOLLARS) TO THE U.S. ECONOMY.

THE U.S. CURRENT ACCOUNT IN TRADE IN TOURISM, WHICH DECLINED FROM A DEFICIT OF $9.4 BILLION IN 1985, SHOWED AN ESTIMATED SURPLUS OF $450 MILLION IN 1989. WE EXPECT THIS SURPLUS WILL GROW TO A PROJECTED $1.5 BILLION IN 1990, AND FURTHER IMPROVE IN THE YEARS TO COME.

THE UNITED STATES' SHARE OF THE INTERNATIONAL TOURISM MARKET, WHICH GREW FROM 13.9 PERCENT IN 1987 TO

16.4 PERCENT IN 1989, WILL APPROACH 17 PERCENT IN 1990. OUR SHARE OF WORLD TOURISM EARNINGS COULD HIT 21 PERCENT BY THE END OF THIS DECADE.

FEDERAL, STATE, AND LOCAL TAX REVENUE GENERATED THROUGH INTERNATIONAL TRADE IN TOURISM SHOULD REACH APPROXIMATELY $4.5 BILLION THIS YEAR UP FROM $4 BILLION IN 1989. OF THIS AMOUNT, OVER $2 BILLION WILL FLOW TO THE FEDERAL GOVERNMENT. TRAVEL AND TOURISM GENERATES $172 IN TAX RECEIPTS FOR EVERY $1 APPROPRIATED BY CONGRESS TO STIMULATE U.S. EXPORT TRADE IN TOURISM.

AGENCY OVERVIEW AND REVIEW OF FY 1990 PROGRAMS

MORE THAN 170 NATIONAL GOVERNMENTS OPERATE TOURISM EXPORT PROMOTION AGENCIES AROUND THE WORLD. THESE AGENCIES COMMONLY MAINTAIN OFFICES AND PERSONNEL IN MAJOR OUTBOUND FOREIGN MARKETS IN AN EFFORT TO STIMULATE TOURISM EXPORT RECEIPTS FOR THEIR COUNTRIES AND INCREASE THEIR COUNTRIES' SHARE OF THE INTERNATIONAL TRAVEL MARKET.

THE SERVICES PERFORMED BY THESE AGENCIES, THROUGH THEIR HEADQUARTERS STAFFS AND THEIR FOREIGN MARKET OFFICES, ARE DETERMINED PARTIALLY IN RESPONSE TO PUBLIC DEMAND AND EXPECTATION, AND PARTIALLY IN RESPONSE TO COMPETITION FROM OTHER NATIONAL GOVERNMENTS.

USTTA OPERATES REGIONAL OFFICES IN CANADA, MEXICO, THE UNITED KINGDOM, FRANCE, THE FEDERAL REPUBLIC OF

GERMANY, THE NETHERLANDS, ITALY, JAPAN, AND AUSTRALIA. USTTA ALSO MAINTAINS AN OFFICE IN MIAMI TO SERVICE FIVE KEY SOUTH AMERICAN MARKET COUNTRIES, AND THE AGENCY IS REPRESENTED IN 11 OTHER SECONDARY MARKETS BY THE COMMERCE DEPARTMENT'S U.S. AND FOREIGN COMMERCIAL SERVICE. IN ADDITION, USTTA MAINTAINS AN INTERNATIONAL CONGRESS OFFICE IN PARIS.

EACH OF USTTA'S REGIONAL OFFICES AND SPECIAL MARKET REPRESENTATIVES ARE:

* CATALYSTS FOR COOPERATIVE TRADE DEVELOPMENT PROGRAMS WHICH BRING TOGETHER COMPETING U.S. COMPANIES TO JOINTLY MARKET THE UNITED STATES AS A TRAVEL DESTINATION IN THE FOREIGN MARKET;

* IMPARTIAL SOURCES OF INFORMATION FOR FOREIGN CONSUMERS AND THE TRAVEL TRADE;

* FACILITATORS FOR "NEW-TO-MARKET" COMPANIES SEEKING BUSINESS OPPORTUNITIES ABROAD; AND

* EDUCATORS TO THE FOREIGN MARKET DISTRIBUTION SYSTEM.

THIS YEAR WE HAVE SEEN MAJOR ACCOMPLISHMENTS, BUT WE HAVE A LOT MORE TO DO. THE USTTA AGENDA FOR 1990 INCLUDES THE FOLLOWING:

1. FIRST, WE WILL CONTINUE TO WORK WITH CONGRESS TOWARD ENACTMENT OF THE TOURISM POLICY AND EXPORT PROMOTION ACT OF 1990. THIS ACT WILL AMEND THE INTERNATIONAL TRAVEL ACT OF 1961 TO BRING OUR NATIONAL TOURISM POLICY AND USTTA'S GOALS UP-TO-DATE. THE TOURISM INDUSTRY HAS CHANGED DRAMATICALLY SINCE THE LAST TIME THE ACT WAS AMENDED IN 1981 WITH PASSAGE OF THE NATIONAL TOURISM POLICY ACT. THE INCREASING GLOBAL NATURE OF THE U.S. TRAVEL AND TOURISM INDUSTRY AND ITS IMPORTANCE TO OUR BALANCE OF TRADE NEEDS TO BE BETTER REFLECTED IN THE INTERNATIONAL TRAVEL ACT.

2. SECOND, THE VISA WAIVER PROGRAM HAS BEEN A TREMENDOUS SUCCESS. IN JAPAN ALONE, 60% OF ALL VISITORS WHO CAME TO THE U.S. WERE WITHOUT A VISA DURING THE FIRST TEN MONTHS OF 1989. DURING THE SAME PERIOD, 34% OF ALL VISITORS FROM THE UNITED KINGDOM TOOK ADVANTAGE OF THE PROGRAM. THERE ARE NOW EIGHT COUNTRIES PARTICIPATING AND WE HOPE THAT PARTICIPATION WILL CONTINUE TO INCREASE. THE DEPARTMENT OF STATE AND DEPARTMENT OF JUSTICE ARE PREPARING A REPORT ON THE PROGRAM TO BE SENT TO CONGRESS IN MAY OR JUNE. THIS REPORT WILL MAKE RECOMMENDATIONS AS TO WHETHER THE PROGRAM SHOULD BE BOTH PERMANENT AND EXPANDED TO INCLUDE ADDITIONAL COUNTRIES.

3. USTTA IS WORKING WITH THE TRAVEL INDUSTRY ASSOCIATION OF AMERICA (TIA) ON A VISIT USA TRADE FAIR SIMILAR TO POW WOW TO BE HELD IN EUROPE. THE IDEA IS TO PROVIDE AN OPPORTUNITY TO SHOWCASE THE U.S., AS A WHOLE, WITHOUT THE COMPETITION OF OTHER DESTINATIONS. THIS WOULD ALSO ALLOW SMALLER U.S. DESTINATIONS AND COMPANIES TO PARTICIPATE IN AN OVERSEAS SHOW WHICH THEY MIGHT OTHERWISE NOT BE ABLE TO DO. LIKE POW WOW, THE SHOW ORGANIZERS WILL MATCH SUPPLIERS WITH PURCHASERS BY COMPUTERIZED APPOINTMENTS TO MAXIMIZE THE PARTICIPANT'S TIME.

4. USTTA WILL ALSO BE SPONSORING A SERIES OF REGIONAL CONFERENCES AND WORKING-WITH TIA ON JOINTLY SPONSORED INTERNATIONAL TOURISM CONFERENCES THROUGHOUT THE U.S. TO ENCOURAGE DESTINATIONS TO AGGRESSIVELY PURSUE THE LUCRATIVE FOREIGN VISITOR MARKET. THIS WILL SUPPORT A RURAL TOURISM EFFORT AND, IN ADDITION, HELP DESTINATIONS AND ATTRACTIONS LEARN HOW TO DO BUSINESS IN THE FOREIGN MARKETPLACE.

5. EFFORTS IN PRIVATE/PUBLIC SECTOR COOPERATION WILL CONTINUE. ONE OF OUR MOST SUCCESSFUL PROGRAMS HAS BEEN THE USA INFORMATION CENTER IN LONDON IN PARTNERSHIP WITH AT&T. OTHERS INCLUDE SPECIAL ADVERTISING SUPPLEMENTS IN FOREIGN PUBLICATIONS, TRADE SHOW PARTICIPATION, AND COOPERATIVE TELEVISION ADVERTISING CAMPAIGNS SELLING THE U.S. AS A TRAVEL DESTINATION. ANOTHER EXAMPLE IS THE

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	67	26	0
Management and professional services	0	0	0
Special studies and analysis	0	0	0
Management and support services for research and development	0	0	0
	67	26	0

In FY 1990, USTTA required consulting services to finish the Rural Tourism Study and work related to World Tourism Organization issues.

In FY 1991, USTTA does not anticipate any costs for consultants and related services.

Department of Commerce
United States Travel and Tourism Administration
Salaries and Expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals....................................	0	0	0	0
Pamphlets......................................	206	400	313	332
Audiovisuals...................................	0	0	0	0
Total..	206	400	313	332

In FY 1988, for the first time USTTA enlisted financial support from private sector companies in the form of advertising in the USTTA Holiday Planner to enable reprinting of the publication in seven languages.

In FY 1989, USTTA reprinted the six most popular regional travel folders.

In FY 1990 and FY 1991, USTTA will enlist the services of a contractor to develop and design a new series of regional travel folders for use in travel marketing programs abroad.

STATE OF FLORIDA'S CAMPAIGN IN JAPAN THROUGH USTTA'S TOKYO OFFICE. JAPAN'S LARGEST TOUR WHOLESALER, JAPAN TRAVEL BUREAU, WORKED WITH USTTA AND THE STATE OF FLORIDA TO PROMOTE MORE TRAVEL TO ALL AREAS OF THE STATE. SO FAR THERE HAVE BEEN MORE THAN 1000 INCREMENTAL BOOKINGS VALUED AT $2.3 MILLION DOLLARS IN REVENUES TO FLORIDA. THIS KIND OF PLANNING AND COOPERATION CAN BRING MILLIONS OF NEW DOLLARS TO A VARIETY OF DESTINATIONS IN THE U.S.

6. FINALLY, USTTA IS TAKING A LEADERSHIP ROLE IN THE SERIOUS EMPLOYMENT CRISIS OF TOO MANY JOBS AND NOT ENOUGH EMPLOYEES FACING THE TRAVEL AND TOURISM INDUSTRY. IN MANY INSTANCES EACH SEGMENT IS DOING SOMETHING TO COUNTERACT THIS SITUATION, BUT NO ONE IS SPEAKING FOR THE COLLECTIVE INDUSTRY. CONSEQUENTLY, USTTA WILL BE DEVELOPING A HANDBOOK ON CAREERS IN THE TOURISM INDUSTRY. IT WILL CONTAIN A DESCRIPTION OF TASKS AND PREFERRED SKILLS OR EDUCATIONAL REQUIREMENTS AND LIST SOURCES OF FURTHER INFORMATION FOR ALL JOBS IN THIS INDUSTRY. IT WILL ALSO HAVE SPECIAL SECTIONS DEVOTED TO JOBS FOR MINORITIES, HANDICAPPED PERSONS, SENIORS CITIZENS, AND YOUTHS.

FY 1991 PROGRAM

WITH THE REQUESTED FY 1991 APPROPRIATION, USTTA PROPOSES TO:

1. DEVELOP AND IMPLEMENT INTEGRATED, COOPERATIVE TRAVEL EXPORT PROMOTION AND TRADE SUPPORT PROGRAMS IN NINE PRIMARY AND 16 SPECIAL MARKET COUNTRIES ABROAD;

2. CONDUCT REGIONAL, STATE AND LOCAL TOURISM MARKET PLANNING AND PRODUCT DEVELOPMENT SEMINARS;

3. COORDINATE THE FEDERAL GOVERNMENT'S ROLE IN SUPPORTING AND MARKETING MAJOR INTERNATIONAL EVENTS HELD IN THE UNITED STATES WHICH WILL HAVE A SIGNIFICANT IMPACT ON AMERICA'S EXPORT EARNINGS THROUGH TRADE IN TOURISM;

4. COLLECT, ANALYZE AND DISSEMINATE ACCURATE AND TIMELY ECONOMIC, DEMOGRAPHIC, AND CONSUMER BEHAVIOR DATA ON AMERICA'S FOREIGN TRAVEL MARKETS;

5. IDENTIFY AND ATTACK FOREIGN AND DOMESTIC IMPEDIMENTS TO INTERNATIONAL TRADE IN TOURISM THROUGH LEGISLATION, BILATERAL AND MULTILATERAL NEGOTIATIONS; AND COORDINATE NATIONAL TOURISM POLICY THROUGH THE COMMERCE SECRETARY'S TOURISM POLICY COUNCIL AND THE TRAVEL AND TOURISM ADVISORY BOARD.

COOPERATIVE EXPORT PROMOTION AND TRADE SUPPORT PROGRAMS

IN FY 1991, USTTA WILL SEEK THE PARTICIPATION OF MORE THAN 4,000 PUBLIC AND PRIVATE SECTOR COOPERATIVE

PARTNERS WHO WILL INVEST NEARLY $17 MILLION IN EFFORTS TO STIMULATE EXPORT TRADE IN TOURISM TO THE UNITED STATES, ESPECIALLY ITS LESSER-KNOWN DESTINATIONS.

AMONG THE COOPERATIVE PROGRAMS PLANNED FOR FY 1991 ARE PRINT AND TELEVISION ADVERTISING CAMPAIGNS, JOURNALIST AND TRAVEL TRADE PRODUCT INSPECTION TOURS, MARKET DEVELOPMENT MISSIONS, TRAVEL TRADE SHOWS AND OTHER EXPORT PROMOTION ACTIVITIES.

AS IT HAS IN PREVIOUS YEARS, USTTA WILL CONTINUE CONDUCTING WORKSHOPS AND TRAINING PROGRAMS FOR FOREIGN TRAVEL SELLERS IN EACH OF AMERICA'S PRIMARY AND SECONDARY MARKETS. THESE SELLERS ARE THE DISTRIBUTION SYSTEM FOR INTERNATIONAL TRAVEL PRODUCTS AND SERVICES. WITHOUT USTTA'S TECHNICAL GUIDANCE AND INFORMATIONAL ASSISTANCE, THESE AGENTS AND TOUR BROKERS CAN NOT EFFECTIVELY SELL AMERICAN DESTINATIONS TO THEIR CLIENTS. ALTERNATIVELY, THEY SELL COMPETING DESTINATIONS WITH WHICH THEY ARE MORE FAMILIAR.

WE RECOMMEND REDUCING COOPERATIVE EXPORT PROMOTION AND TRADE SUPPORT PROGRAMS BY $411,000. IT IS ANTICIPATED THAT USTTA WILL GENERATE LARGER RETURNS OF PRIVATE FUNDING FOR EVERY USTTA DOLLAR. THEREFORE, USTTA WILL REQUIRE LESS COOPERATIVE CONSUMER ADVERTISING FUNDING BASED ON THE EXPECTED RETURNS.

REGIONAL, STATE AND LOCAL MARKET PLANNING SEMINARS

AMERICA'S BIGGEST CHALLENGE TO REDUCING ITS TRADE DEFICIT LIES IN ITS ABILITY TO PERSUADE MORE AMERICAN COMPANIES TO EXPORT THEIR PRODUCTS AND SERVICES. BECAUSE 90 PERCENT OF THE AMERICAN TRAVEL INDUSTRY'S BUSINESS IS CURRENTLY DOMESTIC, U.S. TRAVEL COMPANIES OFTEN OVERLOOK THE OPPORTUNITIES AVAILABLE IN THE FOREIGN MARKET. THE FACTS ARE THAT:

1. INTERNATIONAL TRAVEL IN TOURISM IS GROWING ALMOST FOUR TIMES FASTER THAN DOMESTIC TOURISM -- 11 PERCENT PER YEAR VERSUS 3 PERCENT FOR THE DOMESTIC MARKET;

2. FOREIGN TRAVELERS SPEND ON AVERAGE SEVEN TIMES MORE THAN THEIR DOMESTIC COUNTERPARTS--$1,900 PER PERSON VISIT VERSUS $254 PER DOMESTIC AMERICAN TRAVELER PER VISIT; AND

3. FOREIGN TRAVELERS TAKE LONGER TRIPS, VISIT MORE PLACES, AND USE COMMERCIAL LODGING AND RENTAL CARS MORE FREQUENTLY THAN THEIR DOMESTIC COUNTERPARTS.

TO ENSURE THAT AMERICAN TRAVEL COMPANIES LEARN ABOUT THE ECONOMIC OPPORTUNITIES OF INTERNATIONAL TRADE IN TOURISM, AND HOW TO BE COMPETITIVE IN THE INTERNATIONAL MARKETPLACE, USTTA WILL HOLD ITS ANNUAL INTERNATIONAL TOURISM CONFERENCE AND AT LEAST SIX REGIONAL MARKET PLANNING SEMINARS IN FY 1991.

DURING THESE PROGRAMS, USTTA STAFF WILL WORK WITH PARTICIPATING INDUSTRY REPRESENTATIVES TO IDENTIFY COMPETITIVE TRAVEL PRODUCTS AND SERVICES AND DEVELOP MARKETING PLANS TO INTRODUCE THOSE PRODUCTS AND SERVICES TO THE INTERNATIONAL MARKET.

BECAUSE INCREASING NUMBERS OF FOREIGN VISITORS TO THE UNITED STATES ARE REPEAT VISITORS, AND BECAUSE U.S. EXPORT TRADE IN TOURISM AFFORDS ONE OF THE BEST POTENTIALS FOR ECONOMIC REVITALIZATION, USTTA WILL WORK CLOSELY WITH THE "LESSER-KNOWN" U.S. DESTINATIONS AND ATTRACTIONS -- THE NORTHWEST, THE GREAT LAKES REGION, AND THE STATES IN MIDDLE AMERICA -- TO ENSURE THAT THEIR TRAVEL PRODUCTS AND SERVICES ARE REPRESENTED IN THE FOREIGN MARKETPLACE.

COORDINATE PUBLIC SECTOR ROLE IN INTERNATIONAL EVENTS

THE U.S. HAS A UNIQUE OPPORTUNITY IN THE 90'S TO ATTRACT A NUMBER OF FOREIGN VISITORS LOOKING FOR ADVENTURE, DISCOVERY AND EDUCATION. 1992 IS THE 500TH ANNIVERSARY OF COLUMBUS' DISCOVERY OF AMERICA. 1994 IS THE YEAR THAT THE U.S. WILL HOST WORLD CUP SOCCER.

THE WORLD SOCCER CUP GAMES ARE EXPECTED TO BRING 1.5 MILLION VISITORS TO OUR SHORES WHO WILL SPEND $1.5 BILLION ON FOOD, LODGING, ENTERTAINMENT AND AMERICAN MERCHANDISE. BOTH EVENTS PRESENT THE U.S. TRAVEL AND TOURISM INDUSTRY

WITH AN UNPRECEDENTED MARKETING OPPORTUNITY TO SHOWCASE OUR DIVERSITY, OUR CULTURE, OUR CITIES AND OUR NATIONAL PARKS, IN SHORT THE WIDE VARIETY OF ATTRACTIONS THAT NO OTHER COUNTRY HAS TO OFFER, . . . AT A REASONABLE COST.

MARKET RESEARCH AND ECONOMIC DATA

PUBLIC AND PRIVATE SECTOR MARKETING AND POLICY PLANNERS RELY ON USTTA RESEARCH DATA TO TARGET FOREIGN CONSUMER MARKETS AND TO ASSESS U.S. INDUSTRY MARKETING PROGRAM IMPACT AND EFFECTIVENESS.

THERE ARE THREE ESSENTIAL ELEMENTS IN USTTA'S FY 1991 RESEARCH PROGRAM INTENDED TO:

- ASSESS THE CONSUMER HABITS AND INTERESTS OF BOTH ACTUAL AND POTENTIAL FOREIGN VISITORS;

- TRACK THE VOLUME AND ECONOMIC IMPACT OF FOREIGN VISITORS TO THE UNITED STATES;

- EVALUATE THE IMPACT OF USTTA'S PRIVATE/PUBLIC SECTOR COOPERATIVE EXPORT PROMOTION INITIATIVES.

LET ME SAY HERE THAT OUR REPORTING METHODS ARE FAR MORE ACCURATE THAN IN YEARS PAST AS THEY ARE NOW BASED ON OUR IN-FLIGHT SURVEYS GIVEN TO PASSENGERS AS THEY LEAVE

THE COUNTRY. WHILE WE FEEL OUR RESEARCH IN THIS AREA CAN STILL BE IMPROVED, IT IS BETTER NOW THAN EVER BEFORE. THIS IS A MAJOR ACCOMPLISHMENT TOWARDS THE INDUSTRY RECEIVING RECOGNITION FOR ITS ROLE IN THE U.S. ECONOMY.

ALONG THE SAME LINES, USTTA IS WORKING WITH THE OFFICE OF ECONOMIC AFFAIRS TO IMPROVE THE QUALITY AND SCOPE OF SERVICE INDUSTRY STATISTICS, PARTICULARLY TRADE-IN-SERVICES DATA. MUCH OF THE GOVERNMENT'S STATISTICAL PROGRAMS STILL REFLECT THE COUNTRY'S ECONOMIC BASE AS IT WAS FORTY OR FIFTY YEARS AGO, WHEN IT WAS MANUFACTURING DRIVEN. THE SERVICES SECTOR NOW REPRESENTS 60% OF THE U.S. GNP. PRESIDENT BUSH HAS IDENTIFIED THE IMPROVEMENT OF SERVICE SECTOR STATISTICS AS ONE OF HIS LONG-TERM GOALS, AND HAS RECOMMENDED THAT THE PROCESS FOR CHANGE BEGIN IMMEDIATELY. OUR GOAL, IS TO HAVE SERVICE SECTOR INFORMATION COLLECTED AND DISSEMINATED SIMILAR TO THE WAY MANUFACTURING FIGURES ARE CURRENTLY REPORTED. WHILE REPORTS ON THE TRADE DEFICIT AND MANUFACTURED GOODS ARE WELL PUBLICIZED, SERVICE SECTOR FIGURES RELEASED QUARTERLY ARE OFTEN GIVEN LITTLE ATTENTION. USTTA IS MAKING THIS EFFORT A KEY PRIORITY -- TO ATTAIN FULL ECONOMIC RECOGNITION FOR THE SERVICES INDUSTRIES,OF WHICH TRAVEL AND TOURISM IS A LARGE PART, AND ENSURE THAT OUR REPORTING METHODS ACCURATELY REFLECT THE U.S. ECONOMY OF THE 90'S.

TRADE POLICY AND IMPEDIMENTS TO INTERNATIONAL TOURISM

USTTA'S TOURISM TRADE POLICY PROGRAM IS COORDINATED WITH THE COMMERCE SECRETARY'S TRAVEL AND TOURISM ADVISORY BOARD AND THE TOURISM POLICY COUNCIL. THE PROGRAM IDENTIFIES FOREIGN GOVERNMENT IMPOSED IMPEDIMENTS TO INTERNATIONAL TRAVEL, AND DEVELOPS AND IMPLEMENTS POLICY INITIATIVES DESIGNED TO ELIMINATE OR REDUCE THESE TRADE IN TOURISM BARRIERS. IMPLEMENTATION OF ESTABLISHED POLICIES IS ACCOMPLISHED IN COOPERATION WITH THE TRAVEL INDUSTRY, OTHER GOVERNMENT POLICY OFFICES, INTER-GOVERNMENTAL BODIES, AND INTERNATIONAL ORGANIZATIONS.

IN FY 1991, USTTA WILL CONTINUE ADDRESSING :

THE AMERICAN TRAVEL INDUSTRY'S INTERESTS AS THEY RELATE TO THE UNIFICATION OF THE EUROPEAN COMMUNITY;

THE INCLUSION OF TRADE IN TOURISM SERVICES IN GATT;

THE NEED FOR BILATERAL TOURISM ARRANGEMENTS; AND

THE INCLUSION OF TOURISM POLICY WITHIN THE BILATERAL CIVIL AVIATION NEGOTIATIONS; AND

OTHER TRADE POLICY INITIATIVES UNDERTAKEN BY THE FEDERAL GOVERNMENT AND THE DEPARTMENT OF COMMERCE WHICH MAY HAVE AN IMPACT ON THE AMERICAN TRAVEL INDUSTRY.

USTTA FOREIGN SERVICE

IN CONJUNCTION WITH USTTA'S TRADE POLICY INITIATIVES, THE AGENCY CONVERTED ITS AMERICAN PERSONNEL LOCATED OUTSIDE THE UNITED STATES TO THE UNITED STATES FOREIGN SERVICE. THE AGENCY'S PERSONNEL HAVE NOW BEEN SWORN IN TO THE USTTA FOREIGN SERVICE.

IN FY 1991 USTTA WILL CONTINUE TO DEVELOP OPERATIONAL GUIDELINES FOR ITS FOREIGN SERVICE PROGRAM. A SPECIFIC PERSONNEL PLAN IS BEING DEVELOPED FOR ROTATING AND EDUCATING USTTA'S FOREIGN SERVICE OFFICERS, FOR INTEGRATING USTTA'S FOREIGN SERVICE PERSONNEL INTO THE AMERICAN DIPLOMATIC COMMUNITY, AND FOR SEEKING HOST COUNTRY DIPLOMATIC RECOGNITION OF USTTA FOREIGN SERVICE OFFICERS.

MULTILINGUAL RECEPTIONISTS PROGRAM

THIS COOPERATIVE PROGRAM HAS BEEN SUPPORTED IN PREVIOUS YEARS BY USTTA, THE U.S. DEPARTMENT OF EDUCATION, AIRPORTS, CITIES, AND COUNTRY AUTHORITIES. USTTA'S PORTION OF FUNDING HAS BEEN ABOUT 16 PERCENT OF THE PROGRAM'S TOTAL COST.

THE MULTILINGUAL RECEPTIONIST PROGRAM NOW OPERATES AT 12 MAJOR U.S. AIRPORTS, PROVIDING ASSISTANCE AND

INTERPRETATION SERVICES TO NON-ENGLISH SPEAKING INTERNATIONAL VISITORS. THE RECEPTIONISTS ARE STATIONED IN FEDERAL INSPECTION AREAS AND WORK CLOSELY WITH THE IMMIGRATION AND NATURALIZATION SERVICE, THE CUSTOMS SERVICE AND THE DEPARTMENT OF AGRICULTURE TO EXPEDITE THE ENTRY OF FOREIGN VISITORS.

FUNDING FOR THIS ACTIVITY, IN THE AMOUNT OF $240,000, IS PROVIDED IN THE ADMINISTRATION'S FY 1991 BUDGET FOR USTTA.

EC, THE PACIFIC AND EASTERN EUROPE

WHILE TOURISM GAINS RECOGNITION AT HOME, MOMENTUM IS ON THE RISE ABROAD. IN THIS REGARD, THERE ARE THREE SIGNIFICANT AREAS I WANT TO CALL TO YOUR ATTENTION: THE EUROPEAN ECONOMIC COMMUNITY, THE PACIFIC AREA, AND EASTERN EUROPE.

YOU ARE ALL FAMILIAR WITH EC92 OR THE UNIFICATION OF THE EUROPEAN ECONOMIC COMMUNITY IN 1992. IF THEY ARE SUCCESSFUL IN THEIR EFFORTS FOR UNIFICATION, THE EC WILL REPRESENT ONE OF THE LARGEST FREE TRADE AREAS IN THE WORLD, WITH A POPULATION OF 325 MILLION AND A GNP OF 3.6 TRILLION.

LET US LOOK TO SEE WHAT THIS MEANS TO U.S. TRAVEL AND TOURISM INDUSTRY COMPONENTS. LET ME GIVE YOU ONE EXAMPLE: THE EC IS CONSIDERING ALLOWING A HIGHER DUTY ALLOWANCE FOR RETURNING RESIDENTS IF THEY TRAVEL TO AN EC COUNTRY. IN OTHER WORDS, IT WILL COST A BRITISH RESIDENT MORE TO SPEND MONEY IN THE U.S. THAN IN FRANCE SINCE THEY WILL BE TAXED A LOWER AMOUNT IF THEY TRAVEL TO FRANCE.

THAT WAS THE BAD NEWS, . . . THE GOOD NEWS IS THAT USTTA AND THE ECONOMIC COMMUNITY HAVE AGREED TO HIGH-LEVEL DISCUSSIONS OF IMPORTANT TOURISM ISSUES.

ANOTHER AREA OF GREAT INTEREST IS THE FORMATION OF THE ASIA PACIFIC ECONOMIC COUNCIL COMPRISED OF CANADA, THE U.S., JAPAN, AUSTRALIA, NEW ZEALAND, THE PHILIPPINES, SINGAPORE, THAILAND, INDONESIA, MALAYSIA, BRUNEI AND SOUTH KOREA. THIS AREA, EXCLUDING THE U.S., HAS A POPULATION OF 468 MILLION AND A GNP OF 4 TRILLION. THESE TWELVE COUNTRIES RECENTLY MET TO DISCUSS COOPERATION IN THREE DIFFERENT AREAS: TOURISM, TELECOMMUNICATIONS AND TRANSPORTATION.

THESE COUNTRIES HAVE RECOGNIZED THE ROLE TOURISM HAS ALREADY PLAYED IN FACILITATING THE DEVELOPMENT OF IMPORTANT INFRASTRUCTURE -- WATER, POWER, SEWERS, ROADS -- ALL OF WHICH ARE NECESSARY FOR TRAVEL. FOREIGN INVESTMENT IN HOTELS AND THE TRANSFER OF TECHNOLOGY THROUGH AIRLINE

AND HOTEL RESERVATION SYSTEMS HAVE ALREADY BENEFITED DEVELOPING NATIONS. THE ECONOMIC BENEFITS OF TOURISM HAVE BEEN RECOGNIZED AND ARE BEING ACTIVELY PURSUED.

IN THESE TWO MOST IMPORTANT MARKET AREAS, EUROPE AND THE PACIFIC, USTTA HAS TAKEN AN ACTIVE ROLE TO REPRESENT OUR DOMESTIC INDUSTRY. WE ARE DISCUSSING TOURISM ISSUES AT THE GOVERNMENTAL LEVEL IN BOTH OF THESE HUGE NEW COMMUNITIES, SEPARATE FROM OTHER TRADE MATTERS. IN ADDITION, THE CHANGES IN EASTERN EUROPE HAVE OPENED UP TREMENDOUS OPPORTUNITIES FOR ALL OF US. INCLUDING RUSSIA, THIS AREA HAS A POPULATION OF 403 MILLION AND GNP OF $2.7 TRILLION. TOURISM CAN SPUR ECONOMIC GROWTH IN THOSE NATIONS, AND MANY OF THEIR RESIDENTS ARE CURIOUS TO DISCOVER AMERICA.

AS WE LOOK INTO THE FUTURE, WE CAN SEE MANY NEW OPPORTUNITIES FOR OUR INDUSTRY. WE ARE VERY FORTUNATE TO LIVE IN AN ERA OF REDUCED POLITICAL TENSIONS WORLDWIDE WHICH SHOULD ENHANCE INTERNATIONAL TRAVEL GLOBALLY. WE PREDICT THAT "SOFT ADVENTURE" TRAVEL LIKE RAFTING TRIPS, RV TRIPS TO THE NATIONAL PARKS, DUDE RANCHES, AND LUXURY RESORTS WILL ALL BENEFIT FROM THESE TRAVELERS. THE EDUCATIONAL COMPONENT TO TRAVEL WILL ALSO BE IMPORTANT -- THE KEY WORDS ARE "DISCOVERING" AND "LEARNING".

MR. CHAIRMAN, THAT CONCLUDES MY TESTIMONY. I WOULD BE PLEASED TO ANSWER THE COMMITTEE'S QUESTIONS.

Mr. **Early**. Fine. That is a summary of your statement so we will include in the record your entire statement.

Mr. **Schnabel**. Thank you, sir.

1990 SEQUESTER

Mr. **Early**. Now, what was the amount sequestered from the 1990 appropriation, and what was the impact on the activities of your agency as a result of the sequestration?

Mr. **Schnabel**. It was $178,000. And the actual number that we ended up with was greater than what we had been budgeted for. So, in effect, it did not have an impact on the operation.

BUDGET REQUEST TO OMB

Mr. **Early**. What did you request OMB for this 1991 budget?

Mr. **Schnabel**. We requested $17,707,000.

Mr. **Early**. Provide for the record where the reductions were taken.

Mr. **Schnabel**. Yes, we will.

[The information follows:]

Budget Request to OMB

The USTTA FY 1991 budget request to OMB was $17,707,000. USTTA's request to Congress is $14,362,000. The reductions total $3,345,000 and 16 full-time equivalents. These reductions are summarized as follows:

Items		Amount
Japan/Far East Tourism trade development initiatives		$1,800,000
Includes new office in Korea	−$750,000	
Cooperative programs in Australia	−230,000	
Expanded activities in Japan	−820,000	
Expanded research programs		−651,000
Improvements to in-flight survey	−400,000	
I-92 statistics on incoming foreign visitors	−182,000	
Research survey	−69,000	
Industry Outreach Program		−414,000
Cooperative trade development programs with U.S. regions		
New USTTA office in Belgium		−240,000
Expand multilingual receptionist program		−240,000
Total		−$3,345,000

AUTHORIZING LEGISLATION

Mr. **Early**. What is the status of your authorizing legislation for fiscal year 1991?

Mr. **Schnabel**. As I understand it, the House is planning to have hearings on an authorization bill sometime this year. At the moment, it is not authorized.

We have been working with the Senate on a bill that would be a new tourism export promotion bill. We are discussing it with the staff at the moment. A lot of the points in that bill I understand could also be proposed in the House bill. We basically are in support of ~~that~~ legislation; however, we are still discussing certain points.

Mr. Early. Well, this is the third year for the fee proposal. Why should we anticipate anything different than what has happened in the past?

Mr. Schnabel. The difference this year is that we are requesting a direct appropriation for the first time in several years. So the agency will be in business with the $14.3 million if that is what it gets, without there being a direct link with the fee.

The Administration is also going to propose a fee, with the funds from that to go to the general account to reduce the deficit.

Mr. Early. And how much do you anticipate you could collect from this fee?

Mr. Schnabel. Mr. Chairman, approximately $22.8 million.

Mr. Early. So it would be more than you were appropriated?

Mr. Schnabel. Yes, sir.

Mr. Early. I understand that that approach was unacceptable to the travel industry in the past.

Do you expect it to be accepted by them this year and why?

Mr. Schnabel. The travel industry has not been in favor of it in the past. I think the travel industry is quite happy that the agency, for the first time in a long time, is requesting an appropriation. And what they will do regarding the proposed fee, I don't know. But I do know that it is the intention to propose a separate fee.

Mr. Early. Okay. And so the Administration is going to propose separate legislation?

Mr. Schnabel. Yes, sir.

Mr. Early. Fine. Why don't you, for the record, provide us with the status of that proposal and what the principal features are.

Mr. Schnabel. Yes, sir.

[The information follows:]

STATUS AND FEATURES OF FEE BILL

In the very near future, the Secretary of Commerce will transmit to the Congress draft legislation requiring the Secretary of the Treasury, on a calendar quarterly basis, to charge and collect from each commercial airline and passenger ship line transporting passengers to the United States, a USTTA facilitation fee.

The commercial airlines and passenger ship lines which carry passengers to and from the United States receive a direct financial benefit from the activities of USTTA and, consistent with the Bush Administration's user fee policy, would be assessed fees to pay the costs of those activities.

The fee charged each airline and passenger ship line each calendar quarter would be the amount equal to one dollar multiplied by the number of passengers arriving at United States ports of entry from foreign countries, possessions, or territories aboard commercial aircraft or passenger ships of that airline or passenger ship line during that calendar quarter that are also required to pay a customs inspection fee.

The provisions of this proposed legislation requiring the Secretary of the Treasury to impose this fee and governing its collection and enforcement are modeled upon, and in most respects are substantially identical to, the provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 which require the Secretary of the Treasury, among other things, to impose on persons arriving at United States ports of entry aboard a commercial aircraft or passenger ship a customs inspection fee of five dollars. Those who issue or sell such a person the applicable ticket of passage are required to collect the customs inspection fee and remit it to the Secretary of the Treasury. (19 U.S.C. § 58c.)

Unlike the customs inspection fee, the airlines and passenger ship lines instead of the passengers would be charged the USTTA facilitation fee. This is because the direct financial beneficiaries of USTTA's activities are the airlines and passenger ship lines and not the passengers, only some of whom receive secondary benefits.

The reason why the USTTA facilitation fee charged each airline and ship line would be based only on the number of their arriving passengers who are required to pay the customs inspection fee instead of on all of their arriving passengers is to structure a USTTA facilitation fee system with the least administrative burden on the airlines and ship lines and on the Federal Government. Rather than each airline or ship line having to keep a count of all their arrivals each quarter and multiplying by one dollar, they would be able to use the number of arrivals they presently count for determining the customs inspection fee they must remit multiplied by one dollar. In other words, the amount for the USTTA facilitation fee they must remit would be the dollar amount of the customs inspection fee they must remit divided by five.

In order to accomplish this, the proposed USTTA facilitation fee legislation excludes from being considered an arrival for purposes of determining the USTTA facilitation fee due, the same group of passengers excluded from having to pay the customs inspection fee under the Reconciliation Act. Specifically, an airline or ship line would not be charged a fee for any arrival whose journey originated in Canada, Mexico, a United States territory or possession, or any of the adjacent Caribbean islands. Likewise, no fee would be charged for a passenger whose journey originated in any of the fifty States, the District of Columbia, or Puerto Rico as long as the journey was limited to Canada, Mexico, a United States territory or possession, or one of the adjacent Caribbean islands. Finally, no fee would be charged for a passenger landing in the United States who is in immediate and continuous transit to a destination outside the United States.

In order to further minimize the administrative burden on the airlines and ship lines and on the Government, the method of collection and the time allowed for remittance to the Secretary of the Treasury for deposit in the General Fund of the United States Treasury would be the same for the USTTA facilitation fee as for the customs inspection fee.

The Secretary of the Treasury would be prohibited from charging the airlines or ship lines any USTTA facilitation fee based on passengers arriving pursuant to a ticket sold prior to the effective date of the fee section. Further, the section of the proposed legislation imposing the fee would be effective thirty days after enactment. The delay in effective date would allow a commercial airline or passenger ship line to adjust its ticket prices, if it wishes, to reflect the one dollar per passenger fee costs it would have to pay, and the prohibition with respect to prior tickets sold would enable the airlines and ship lines to pass on the fee costs to their passengers in all instances.

The proposed legislation would keep the USTTA subject to the budget request and appropriation process. Collected fee revenues will help reduce the Federal deficit.

The proposed legislation would authorize fiscal year 1991 appropriations of $14,362,000, to the Secretary of Commerce for the activities of the USTTA, and subsequent year appropriations of "such sums as may be necessary".

Mr. Early. The budget justification indicates a program reduction in the tourism export development program of $411,000. The justification states that lower priority programs in research, marketing and cooperative advertising will be reduced.

Which specific programs would be reduced?

Mr. Schnabel. It's in the marketing area, $411,000, which is the area where we do cooperative programs with States and with industry. And we hope to be able to make up that amount of money by collecting more from the private sector than we have in the past. So that our percentage will go down and the private sector in the States will pick up more.

Mr. Early. But the justifications suggested that there was a low priority in the research, and your answer was more or less it was a dollar and cents thing.

Mr. Schnabel. Well, we had to come up with the numbers from somewhere. And we felt that we could work on the private sector and make up the shortage. That had something to do with the decision to take it from those programs.

Mr. Early. All right. For the record, provide what you think that impact of that reduction would be on the U.S. tourism industry.

Mr. Schnabel. Yes, sir.

[The information follows:]

Impact of Program Reduction

It is anticipated that USTTA will generate larger returns of private funding for every USTTA dollar invested. Therefore, USTTA will require less cooperative consumer advertising funding based on the expected returns which should minimize the adverse impact of the $411,000 program reduction in the cooperative advertising program.

TRAVEL SURPLUS

Mr. Early. Now, I understand there is a surplus in the balance of payments in the area of travel and tourism.

What is it, sir?

Mr. Schnabel. For 1989, it was $450 million. I mean that is what we are projecting at the moment. And we are projecting something in excess of a billion dollars for this year, which is a substantial turnaround from what it has been over the past number of years.

Mr. Early. Mr. Secretary, one of your predecessors said that the U.S. Government could spend $100 million on promotion of travel and tourism to the United States, or we should eliminate the program entirely.

In other words, anything below $100 million was a waste of money.

What is your view?

Mr. Schnabel. Now, Mr. Chairman, I don't know who that was so I have never discussed it. But I have heard that number.

In my opinion, that sounds very grandiose, and it is the kind of money that we couldn't handle. I think what we are doing is showing that we are performing a function.

All individuals in the agency, which is very small, short of a hundred people actually, do an incredible job performing with very little money. I think $100 million would be substantially over-budgeting, and I wouldn't know what to do with it.

Mr. **Early**. You don't think you could perform that type of outreach as far as other parts of the world? You've got your budget as it is today. You're not getting to too many places. You are not really reaching out, getting the needed outreach probably.

Mr. **Schnabel**. Well, we are covering, Mr. Chairman, with the offices that we have today in the overseas markets, we are covering we think 70 percent of the marketplace out there.

I suppose with more money and more people, of course, we could do a greater and better penetration of that market. But for what we have to operate with today, I think the results are basically pretty good.

Many other countries, as you know, spend a lot more on a per capita basis. The United States, of course, is one of the number one destinations in the world. And I think that with the help of the private sector, and what we do as a catalyst with that sector, I think we are delivering.

Mr. **Early**. Mr. Schnabel, when you say we're reaching, 70 percent of the world, we are reaching it, but are we covering it? We do so much with statistics to say we've been in this country, et cetera.

I mean, I would just think am I advocating? I would just think that in tourism you really would have a lot of availability towards it then.

Mr. **Schnabel**. There is no question about it, that we could do more. $100 million, I think, is something that is probably over what we could use.

Mr. **Early**. Mr. Schnabel, I want to thank you for your testimony.

We think that there is an awful lot of potential monies and just goodwill and just everything in tourism.

I want to thank you for your testimony Mr. Schnabel. With that, we will conclude this morning's hearing and recess till 2 p.m.

WEDNESDAY, FEBRUARY 28, 1990.

ECONOMIC AND STATISTICAL ANALYSIS

WITNESSES

DR. MICHAEL R. DARBY, UNDER SECRETARY, ECONOMIC AFFAIRS

ALLAN H. YOUNG, DIRECTOR, BUREAU OF ECONOMIC ANALYSIS

B. JEROME JACKSON, DIRECTOR, OFFICE OF ADMINISTRATION

SUSANNE H. HOWARD, ASSOCIATE UNDER SECRETARY, ECONOMIC AFFAIRS

FREDERICK T. KNICKERBOCKER, EXECUTIVE DIRECTOR, ECONOMIC AFFAIRS

CLIFTON T. BECK, BUDGET OFFICER, ECONOMIC AND STATISTICAL ANALYSIS

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER [presiding]. The Committee will come to order.

The first item that we shall consider today is the FY 1991 budget request for Economic and Statistical Analysis in the Department of Commerce. The request is for $39,940,000. This amount represents an increase of $9,040,000 above the appropriation enacted for FY 1990.

We shall insert the budget justification submitted in support of this request into the record at this point.

[The justifications follow:]

DEPARTMENT OF COMMERCE
ECONOMIC AND STATISTICAL ANALYSIS
Budget Estimates, Fiscal Year 1991
Congressional Submission
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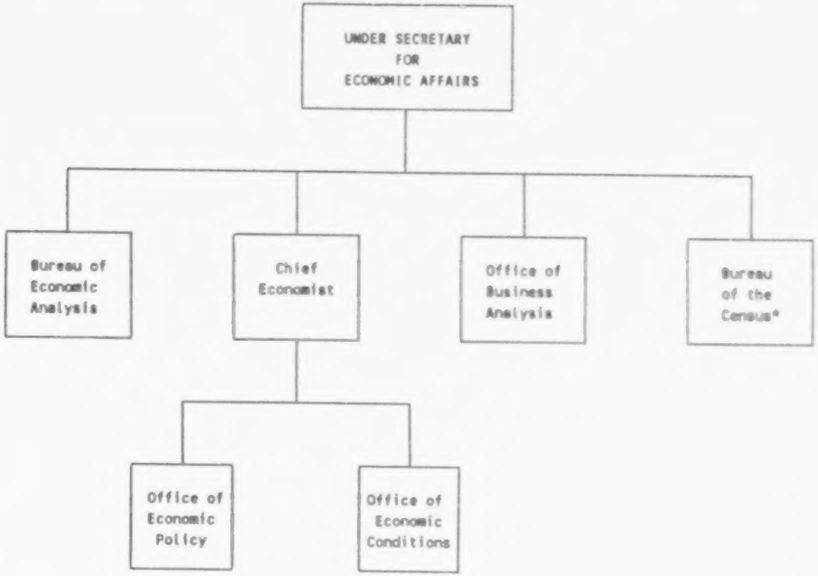
January 1990

U.S. DEPARTMENT OF COMMERCE
ECONOMIC AND STATISTICAL ANALYSIS


UNDER SECRETARY FOR ECONOMIC AFFAIRS
Bureau of Economic Analysis
Chief Economist
Office of Business Analysis
Bureau of the Census*
Office of Economic Policy
Office of Economic Conditions

*The Bureau of the Census reports to the Under Secretary but is funded through separate appropriations.

General Statement

The Economic and Statistical Analysis (ESA) account consists of the Economic Analysis and the Business Analysis programs which are under the direction of the Under Secretary for Economic Affairs, and the Economic Policy and Economic Conditions programs which are under the direction of the Chief Economist for the Department of Commerce. The Under Secretary for Economic Affairs furnishes policy guidance and has overall responsibility for all ESA programs.

A comparison of the FY 1990 appropriation and the FY 1991 estimate is shown below.

(Dollar amounts in thousands)

	1990 Appropriation Currently Available		1991 Estimate		Inc.(+) or Dec.(-)		Perm. Emp. 11/30
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses.	531	$30,908	627	$39,948	+96	+$9,402	443

The FY 1991 budget request for the ESA account is 634 positions and $39,948,000. This represents a increase of 96 positions and $9,402,000 from the FY 1990 appropriation of 531 positions and $30,908,000 currently available.

ECONOMIC ANALYSIS

The goal of this activity is to provide a clear picture of the U.S. economy through the preparation, development, and interpretation of the national income and product accounts, summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace the interrelationships among industrial markets; personal income and related economic series by geographic area; the U.S. balance of payments accounts and associated foreign investment accounts; and measures relating to environmental change within the framework of the national economic accounts. The work on the national economic accounts is supplemented by the preparation and analysis of other measures of business activity, including various tools for forecasting economic developments, such as econometric models of the U.S. economy and a system of leading, coincident, and lagging economic indicators. The data and analyses prepared by this activity are disseminated mainly through its monthly publications, the Survey of Current Business, including periodic supplements to the Survey, and Business Conditions Digest.

The measures and analyses produced are used in the formulation and execution of fiscal, financial, international, and other policies related to he major economic goals of the Nation. Business plans its production, price, and investment programs with the aid of the information provided. This information is essential also for economic decisionmaking by State and local governments, labor, other economic groups, and by the growing number of individuals who feel a need for a better orientation in an economic world that is becoming increasingly complex. Universities and research organizations rely in their teaching and research programs on the information provided.

POLICY SUPPORT

The goal of this activity is to advise the Secretary, Under Secretary, and other Government officials in interpreting the state of the economy, and on matters relating to economic policy. This activity's responsibilities include: (1) providing direct support for the Secretary's participation in the Economic and Domestic Policy Councils, and in similar Administration economic policy forums; (2) preparing speeches, reports, and articles on a wide range of economic matters; (3) advising the Under Secretary on the ecunomic impact of proposed legislation and proposed Departmental and other Federal regulations; and (4) analyzing the cross-industry effects of macroeconomic developments and providing analyses of basic microeconomic problems relevant to current policy issues.

Highlights

Program Changes

The FY 1991 budget proposes four program increases in the Economic Analysis activity. Increases are requested to stop the deterioration in the quality of the U.S. national economic accounts, to modernize and extend the U.S. national economic accounts, to improve the quality of the balance of payments estimates and related analyses, and to improve the quality of the international investment data.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA			535	31,150
		FTE/Obl.			462	
	Sequester applied, 1990	Pos./BA			(4)	(242)
		FTE/Obl.			(4)	
	Appropriation currently available, 1990	Pos./BA			531	30,908
		FTE/Obl.			458	
	1991 Adjustments to base:					
ESA-11	Adjustment for 1990 pay increase and related costs	Pos./BA	0	813		
		FTE/Obl.	0			
	Other cost changes	Pos./BA	0	1,232		
		FTE/Obl.	0			
	Subtotal, adjustments to base	Pos./BA	0	2,045	0	2,045
		FTE/Obl.	0		0	
	1991 Base	Pos./BA			531	32,953
		FTE/Obl.			458	

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Economic Analysis											
ESA-21	National economic accounts	Pos./BA	147	9,100	154	9,555	156	10,166	206	13,718	50	3,552
		FTE/Obl.	124	9,063	140		140		181		41	
ESA-33	International economic accounts	Pos./BA	136	6,975	139	7,190	139	7,673	185	11,116	46	3,443
		FTE/Obl.	124	7,158	122		122		160		38	
ESA-45	Regional economic accounts	Pos./BA	84	4,064	84	4,122	84	4,381	84	4,381	0	0
		FTE/Obl.	65	4,105	73		73		73		0	
ESA-49	Analysis of economic trends	Pos./BA	81	4,677	80	4,744	77	5,046	77	5,046	0	0
		FTE/Obl.	62	4,251	62		59		59		0	
	Subtotal, Economic Analysis	Pos./BA	448	24,816	457	25,611	454	27,266	550	34,261	96	6,995
		FTE/Obl.	375	24,577	397		394		473		79	
	Policy Support											
ESA-53	Policy support	Pos./BA	80	5,604	74	5,297	77	5,687	77	5,687	0	0
		FTE/Obl.	85	5,269	61		64		64		0	
	Productivity, Technology, and Innovation											
ESA-57	Productivity, technology, and innovation	Pos./BA	35	2,054	0	0	0	0	0	0	0	0
		FTE/Obl.	18	2,052	0		0		0		0	
	Japanese Technical Literature											
ESA-59	Japanese technical literature	Pos./BA	2	425	0	0	0	0	0	0	0	0
		FTE/Obl.	2	376	0		0		0		0	
	Direct Obligations	Pos./BA	565	32,899	531	30,908	531	32,953	627	39,948	96	6,995
		FTE/Obl.	480	32,274	458		458		537		79	

Department of Commerce
Economic and Statistical Analysis
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity:		1989 Actual Personnel	1989 Actual Amount	1990 Currently Available Personnel	1990 Currently Available Amount	1991 Base Personnel	1991 Base Amount	1991 Estimate Personnel	1991 Estimate Amount	Increase/(Decrease) Over 1991 Base Personnel	Increase/(Decrease) Over 1991 Base Amount
Economic Analysis											
National economic accounts..................	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0		0		0		0	
International economic accounts............	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0		0		0		0	
Regional economic accounts..................	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0		0		0		0	
Analysis of economic trends.................	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0		0		0		0	
~~Subtotal, Economic~~ Analysis..................	Pos./BA	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0		0		0		0	
Policy Support											
Policy support..............................	Pos./BA	3	611	3	1,105	7	810	7	1,010	0	200
	FTE/Obl.	3	566	3		7		7		0	
Productivity, Technology, and Innovation											
Productivity, technology, and innovation...	Pos./BA	0	250	0	0	0	0	0	0	0	0
	FTE/Obl.	0	250	0		0		0		0	
Japanese Technical Literature											
Japanese technical literature..............	Pos./BA	0	58	0	0	0	0	0	0	0	0
	FTE/Obl.	0	3	0		0		0		0	
Not specified................................	Pos./BA	64	1,371	64	789	64	1,090	64	1,090	0	0
	FTE/Obl.	34	1,182	49		49		49		0	
Total..	Pos./BA	67	2,290	67	1,894	71	1,900	71	2,100	0	200
	FTE/Obl.	37	2,001	52		56		56		0	

Department of Commerce
Economic and Statistical Analysis
Summary of OFFSETTING RECEIPTS
(Dollar amounts in thousands)

Activity: Offsetting Receipts
Subactivity: Offsetting receipts

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Net Change Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Reimbursable program......................	Pos./BA	0	(2,290)	0	(1,900)	0	(1,900)	0	(2,100)	0	(200)
	FTE/Obl.	0	(2,001)	0		0		0		0	
Reimbursable Obligations.................	Pos./BA	0	(2,290)	0	(1,900)	0	(1,900)	0	(2,100)	0	(200)
	FTE/Obl.	0	(2,001)	0		0		0		0	

Department of Commerce
Economic and Statistical Analysis
SUMMARY OF FINANCING
(Dollar amounts in thousands)

Comparison by activity:	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) Over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	34,275	32,802	34,847	42,042	7,195
Financing:					
Offsetting collections from:					
Federal funds	(1,554)	(1,505)	(1,505)	(1,705)	(200)
Trust funds	0	0	0	0	0
Non-Federal sources	(447)	(395)	(395)	(395)	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance lapsing	625	0	0	0	0
Reimbursable sequester	0	6	6	6	0
Budget Authority	32,899	30,908	32,953	39,948	6,995
Transferred to/from other accounts	0	0	0	0	0
Sequester	0	242	242	242	0
Appropriation	32,899	31,150	33,195	40,190	6,995

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

		Personnel	Amount
ADJUSTMENTS:			
Adjustment for FY 1990 pay increase and related costs.	Pos.	0	747
	FTE	0	
Management savings			
A-76 Savings	Pos.	0	(10)
	FTE	0	
COST CHANGES:			
Adjustment for FY 1991 pay increases and related costs	Pos.	0	494
	FTE	0	
Salary rate increase for accountant/auditor employees.	Pos.	0	28
	FTE	0	
One more compensable day	Pos.	0	84
	FTE	0	
Civil Service Retirement System.	Pos.	0	(62)
	FTE	0	
Federal Employees' Retirement System			
Federal Employees' Basic Benefits.	Pos.	0	117
	FTE	0	
Thrift Savings Plan.	Pos.	0	18
	FTE	0	
Federal Insurance Contribution Act (OASDI)	Pos.	0	58
	FTE	0	
Medicare	Pos.	0	6
	FTE	0	
Health Insurance premium	Pos.	0	123
	FTE	0	
Employee's Compensation Fund	Pos.	0	(7)
	FTE	0	
Rental payments to GSA	Pos.	0	123
	FTE	0	
Communications, utilities, and miscellaneous charges			
Federal Telecommunications System.	Pos.	0	(45)
	FTE	0	
Printing and reproduction.	Pos.	0	44
	FTE	0	
Other services			
Working Capital Fund	Pos.	0	314
	FTE	0	
Supplies	Pos.	0	13
	FTE	0	
Total Adjustments to Base.	Pos.	0	$2,045
	FTE	0	

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF ADUSTMENTS TO BASE
(Dollar amounts in thousands)

ADJUSTMENTS:

		Personnel	Amount
Adjustment for FY 1990 pay increase and related costs	Pos.	0	747
	FTE	0	

Total cost in FY 1990 of pay increase	$557
Less amount absorbed in FY 1990	($557)

Anticipated FY 1990 pay increase supplemental	$0
Additional amount in FY 1991 to provide full-year cost of pay increase	$747
Less amount absorbed	$0

Adjustment for FY 1990 pay increase	$747

Management savings

		Personnel	Amount
A-76 Savings	Pos.	0	(10)
	FTE	0	

The FY 1990 budget provided for A-76 reviews which will result in a savings of $10,000 in FY 1991.

COST CHANGES:

Adjustment for FY 1991 pay increases and related costs

	Personnel	Amount
Pos.	0	494
FTE	0	

The President's Budget includes an estimated general pay raise of 3.5 percent effective January 1, 1991. One-half of that increase will be absorbed. The estimate also includes an average SES increase of 22 percent, with 50 percent of the cost absorbed.

Total cost in FY 1991 of general pay increase	$622	
Less amount absorbed	($311)	
Subtotal, adjustment for FY 1991 general pay increase	$311	$311
Total cost in FY 1991 of SES pay increase	$366	
Less amount absorbed	($183)	
Subtotal, adjustment for FY 1991 SES pay increase	$183	$183
Total adjustment for FY 1991 pay increase		$494

Salary rate increase for accountant/auditor employees

	Personnel	Amount
Pos.	0	28
FTE	0	

Effective November 7, 1988, salaries for GS-5, GS-7, and GS-9 accountants and auditors in the Washington, D.C. metropolitan area were increased. ESA's full-year cost for salaries and personnel benefits in FY 1990 for this increase will be $28,000 covering 10 positions in the international investment program.

Total salaries for accountant/auditor employees, old salary rate	$237	
Total salaries for accountant/auditor employees, new salary rate	$261	
Cost of salary rate increase for personnel compensation	$24	$24
Cost of salary rate increase for benefits		$4
Adjustment for cost of salary rate increase		$28

		Personnel	Amount
One more compensable day	Pos.	0	84
	FTE	0	

The cost of one more compensable day in FY 1991 compared to FY 1990 was calculated by dividing the FY 1990 estimate for personnel compensation by 260 compensable days.

Personnel compensation for FY 1990	$19,534	
Compensable day in FY 1990	260	
Increase for one more compensable day for personnel compensation		$75
Personnel benefits for FY 1990	$2,276	
Compensable day in FY 1990	260	
Increase for one more compensable day for benefit costs		$9
Total increase for one more compensable day		$84

		Personnel	Amount
Civil Service Retirement System	Pos.	0	(62)
	FTE	0	

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by CSRS will drop from 75.5 percent in FY 1990 to 70.8 percent in FY 1991. This will result in a decrease of $62,000 in the cost of CSRS contributions.

Total salaries subject to retirement for FY 1990	$18,941	
CSRS cost in FY 1990 ($18,941,000 x .755 x .07)		$1,001
CSRS cost in FY 1991 ($18,941,000 x .708 x .07)		$939
Decrease in CSRS contributions		($62)

	Personnel	Amount

Federal Employees' Retirement System

Federal Employees' Basic Benefits

	Personnel	Amount
Pos.	0	117
FTE	0	

The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 24.5 percent in FY 1990 to 29.2 percent in FY 1991. In addition, the agency's contribution for basic benefits will rise from 12.9 percent in FY 1990 to 13 percent in FY 1991. The calculation for increased costs for basic benefits is:

Total salaries subject to retirement for FY 1990	$18,941	
Basic benefit cost in FY 1990 ($18,941,000 x .245 x .1297)		$602
Basic benefit cost in FY 1991 ($18,941,000 x .292 x .1300)		$719

Increase in basic benefit contributions		$117

Thrift Savings Plan

	Personnel	Amount
Pos.	0	18
FTE	0	

The cost of agency contributions to the Thrift Savings Plan will rise as FERS participation increases. This adjustment reflects the difference between the FY 1990 and FY 1991 costs associated with the employer contribution to the Thrift Savings Plan for FERS employees. The increased costs for contributions to the Thrift Savings Plan are:

Thrift Savings Plan cost in FY 1990 ($18,941,000 x .245 x .02)	$93
Thrift Savings Plan cost in FY 1991 ($18,941,000 x .292 x .02)	$111

Increase in Thrift Savings Plan	$18

Federal Insurance Contribution Act (OASDI)

	Personnel	Amount
Pos.	0	58
FTE	0	

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise from $50,025 in FY 1990 to $52,725 in FY 1991, and the OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in FY 1991. This will result in an increase of $58,000.

FERS payroll subject to FICA tax in FY 1990 (18,961,000 x .245 x .89)	$4,130		
FERS OASDI Tax in FY 1990 (4,130,085 x .0617)		$255	
FERS payroll subject to FICA tax in FY 1991 (18,961,000 x .292 x .91)	$5,033		
FERS OASDI Tax in FY 1991 (5,033,002 x .0620)		$312	

Increase in OASDI for full-time permanent		$57	$57
OTP payroll subject to FICA Tax in FY 1990 (593,000 x .89)	$528		
OASDI Tax in FY 1990 (527,770 x .0617)		$33	
OTP payroll subject to FICA Tax in FY 1991 (593,000 x .91)	$540		
OASDI Tax in FY 1991 (539,630 x .0620)		$34	

Increase in OASDI for other than permanent		$1	$1

Total OASDI increase			$58

Medicare

	Personnel	Amount
Pos.	0	6
FTE	0	

All employees are subject to medicare contributions. The rate will remain at 1.45 percent, but the percentage of total payroll subject to FICA will increase from 89 percent for FTP in FY 1990 to 91 percent for FTP in FY 1991, an amount of $6,000.

Total payroll subject to FICA in FY 1990 (19,534,000 x .89)	$17,385	
Total payroll subject to FICA in FY 1991 (19,534,000 x .91)	$17,776	

Increase in payroll subject to FICA	$391	
Increase in Medicare tax (390,700 x.0145)		$6

		Personnel	Amount
Health Insurance premium	Pos.	0	123
	FTE	0	

The cost of the Government's contribution to Federal employee's health insurance premiums increased by 28 percent effective January 1989. This increase requires an additional $123,000 calculated on the estimate presented in the FY 1990 Budget of $439,000.

		Personnel	Amount
Employee's Compensation Fund	Pos.	0	(7)
	FTE	0	

This $7,000 decrease for Employee's Compensation Fund reflects a cost reduction in compensation payments from FY 1988 to FY 1989.

		Personnel	Amount
Rental payments to GSA	Pos.	0	123
	FTE	0	

The GSA rate is expected to increase the cost of currently occupied space in FY 1991 by 4.4 percent nationwide. This increase was applied to the FY 1990 rental estimate, requiring an additional $123,000.

Communications, utilities, and miscellaneous charges

		Personnel	Amount
Federal Telecommunications System	Pos.	0	(45)
	FTE	0	

Following the implementation of the FTS-2000 system, GSA anticipates lower rate charges for telephone service.

		Personnel	Amount
Printing and reproduction	Pos.	0	44
	FTE	0	

The cost of printing, both paper and labor, continues to increase. For FY 1991, the United States Government Printing Office projected a 7 percent increase over FY 1990, an increase of $44,000.

Other services

Working Capital Fund

	Personnel	Amount
Pos.	0	314
FTE	0	

This request is to fund cost increases in the Departmental Working Capital Fund (WCF) to maintain its current level of operation.

Supplies

	Personnel	Amount
Pos.	0	13
FTE	0	

Continued inflation in the price of supplies, materials, and publications is based on the GNP implicit price deflator. The $13,000 increase represents 4 percent of the FY 1990 estimate.

Total Adjustments to Base

	Personnel	Amount
Pos.	0	$2,043

Appropriation Language and Code Citations

For necessary expenses, as authorized by law, of economic and statistical analysis programs.

15 U.S.C. 171 et seq., (Chapter 5);
15 U.S.C. 1501 et seq., (Chapter 40);
22 U.S.C. 286F, 3101 et seq., (Chapter 46);
30 U.S.C. 1604;
35 U.S.C. 200 et seq., (Chapter 18);
40 U.S.C. 759(f);

15 U.S.C. 171 et seq., (Chapter 5) provides for the establishment of the Bureau of Economic Analysis (BEA) and provides the authority(ies) and responsibility(ies) for the functions of the Bureau of Economic Analysis.

15 U.S.C. 1501 et seq., (Chapter 40) provides the Secretary of Commerce (delegated by Departmental order to the Under Secretary for Economic Affairs) with the authority to carry out economic and statistical analysis functions.

15 U.S.C. 1503a. provides for the position of Under Secretary of Commerce for Economic Affairs. The Under Secretary shall perform such duties as the Secretary shall require.

15 U.S.C. 1512 provides the Department of Commerce with the authority to foster, promote and develop the foreign and domestic commerce of the United States, to the extent necessary for the performance of the ESA functions.

15 U.S.C. 1516 provides the Secretary of Commerce with authority to gather and distribute statistical information.

22 U.S.C. 286f provides that the President shall make available balance of payments information as required by the Bretton Woods Agreement Act. The Bureau of Economic Analysis was assigned responsibility by Executive Order No. 10033, as amended and subsequent Departmental delegation for the collection of certain balance of payments data and the publication of the U.S. balance of payments accounts.

22 U.S.C. 3101 et seq., (Chapter 46) provides that the President shall undertake mandatory surveys of U.S. direct investment abroad and foreign direct investment in the United States. The Bureau of Economic Analysis was assigned responsibility for the direct investment surveys under this Act by Executive Order No. 11961 and subsequent Departmental delegation.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: National economic accounts

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National economic accounts....................	Pos./BA	147	9,100	154	9,555	154	10,166	204	13,718	50	3,552
	FTE/Obl.	124	9,063	140		140		181		41	
Direct Obligations...........................	Pos./BA	147	9,100	154	9,555	154	10,166	204	13,718	50	3,552
	FTE/Obl.	124	9,063	140		140		181		41	

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Economic Analysis
Subactivity: National economic accounts

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and analysis of the economic accounts of the United States.

Objectives: To maintain and improve the system of national economic accounts. The national economic accounts consist of the national income and product and wealth accounts, which provide an overall view of the economic process; the interindustry accounts, which show how the various industries of the Nation interact to produce the gross national product (GNP); and the government accounts, which provide a detailed view of Federal and of State and local governments in the GNP framework.

Base Program

National economic accounts - This work consists of the preparation, development, and analysis of the national income and product accounts, wealth accounts, measures relating to environmental change, the underlying interindustry (input-output) accounts, and the associated government accounts. The national income and product accounts, summarized by the GNP, provide an up-to-date, overall view of national production, its distribution, and its use as shown by the interrelated receipts and expenditures of producers, consumers, investors, government, and the foreign customers of the United States. The wealth accounts show the business and other components of tangible national wealth. Measures relating to environmental change include estimates of the expenditures for pollution abatement and control prepared within the framework of the national economic accounts. More specifically, the output consists of the following:

1. Monthly personal income and outlays - These estimates show personal income by type, personal taxes, total and per capita disposable personal income in current and constant dollars, personal consumption expenditures in current and constant dollars, and personal saving. Estimates of personal income and outlays are released to the public about 4 weeks after the close of the reference month and are published monthly in the Survey of Current Business (Survey).

2. GNP estimates - These estimates show GNP by type of expenditure, type of product, sector, and industry, in current and constant dollars; gross domestic product, net national product, and national income, by sector and industry, in current and constant dollars; command GNP and command national income in constant dollars; gross domestic product of corporate business in current and constant dollars; motor vehicle output, farm output, and housing output, in current and constant dollars; personal income and its disposition; personal consumption expenditures by major type of product, in current and constant dollars; national income by type of income and industry; government receipts and expenditures, by type; government purchases of goods and services, by type, in current and constant dollars; government expenditures by type and function; foreign transactions; saving and investment; private purchases of producers' durable equipment and structures, by type, in current and constant dollars; inventories and final sales of business, in current and constant dollars; number of employees, persons engaged in production, hours worked by employees, corporate profits, corporate income taxes, dividends, and undistributed profits, by industry; and price measures for GNP and its components.

Advance estimates in considerable detail are released to the public about 4 weeks after the end of the quarter, and are published in the Survey in the first month after the end of the quarter. The first full set of quarterly estimates is released to the public about 8 weeks after the end of the quarter and is published in the Survey in the second month after the end of the quarter. A revised full set of quarterly estimates is released to the public 11 weeks after the end of the quarter and is published in the Survey in the third month after the end of the quarter.

Advance annual estimates for the preceding year are published in the January Survey. Estimates for the 3 most recent years are revised on the basis of more comprehensive information and, except in benchmark years, are published in the July Survey. The greater wealth of underlying data permits the publication of considerably more detail than is possible for the quarterly figures. One hundred thirty-two tables are shown in the July Survey; quarterly estimates from 54 of these tables are published in the Survey in other months.

Comprehensive GNP benchmark estimates are prepared based largely on the results of the quinquennial economic censuses and the benchmark input-output tables. The results of the most recent benchmark revision, which incorporated the 1977 input-output tables and preliminary results of the 1982 economic censuses, were published in the December 1985, February 1986, and March 1986 Surveys. An historical supplement was published in the Fall of 1986.

3. GNP by industry - Preliminary annual estimates of GNP by industry, in current and constant dollars, are published in the April Survey. The estimates are revised on the basis of more comprehensive information and, except in benchmark years, are published in greater industrial detail in the July Survey. (In 1989, publication of the preliminary and revised estimates was delayed in order to revise the estimates beginning in 1977 to incorporate improvements.)

4. Fixed capital - Estimates of the nonresidential fixed business capital of the United States are made annually by detailed industry. These cover gross and net capital stocks, depreciation, discards, and average ages of net and gross capital stocks. The estimates are provided by legal form of organization in historical-cost, constant-cost, and current-cost valuations, and by type of structure and equipment. Summary estimates are published in the August Survey. Detailed estimates and a description of the methodology were published in August 1987 in a special supplement.

   Estimates of the value of the Nation's stock of housing are made annually. These estimates show gross and net stocks, in historical-cost, constant-cost, and current-cost valuations, of the value of the farm and nonfarm housing stock, by type of structure -- one-to-four dwelling unit structures, structures containing five or more dwelling units, mobile homes, and owner- and tenant-occupied dwelling units. Summary estimates are published in the August Survey. Detailed estimates and a description of the methodology were published in August 1987 in a special supplement.

   Estimates of the value of the stock of consumer durables are made annually. These estimates show gross and net stocks of durable goods owned by consumers in constant-cost and current-cost valuations. Summary estimates are published in the August Survey. Detailed estimates and a description of the methodology were published in August 1987 in a special supplement.

   Estimates of the value of the stock of fixed capital owned by the Federal Government and by State and local governments are made annually. These estimates show gross and net stocks, in constant-cost and current-cost valuations, for all government, the Federal Government, and State and local governments separately for equipment and structures. Summary estimates are published in the August Survey. Detailed estimates and a description of the methodology were published in August 1987 in a special supplement.

5. Inventories and business sales - Estimates of inventories and final sales of business, in current and constant dollars, and inventory-sales ratios are published quarterly in the Survey, as are separate estimates of manufacturing and trade. Estimates of manufacturing inventories by stage of fabrication also are published quarterly.

6. Environmental statistics - Annual estimates of capital expenditures and operating costs for pollution abatement and control, prepared within the framework of the national economic accounts, are published in the Survey. These estimates are prepared in current and constant dollars and are classified by sector of the economy (consumers, business, and government) and by the element of the environment affected (air, land, and water). Industry detail for annual estimates of nonfarm business capital expenditures for pollution abatement and selected industry detail for gross and net stocks for pollution abatement are prepared and published in the Survey.

7. Special compilations for international organizations - Official translations of the U.S. national income and product accounts into the forms prescribed by the United Nations and the Organization for Economic Cooperation and Development (OECD) are prepared for these organizations.

8. Input-output tables - Input-output tables show, for each industry, the amount of its output that is used by every other industry as raw materials or semi-finished products, as well as the sales to the final markets -- consumers, business investors, government, and foreigners. They also show, for each industry, its consumption of the output of every industry and its value added (total industry output less the value of materials consumed and services purchased).

   Comprehensive benchmark input-output tables are prepared every 5 years. The most recent benchmark input-output tables at the 537 industry level are for 1977 and were published in the May and October 1984 Surveys and supplements. Annual input-output tables, prepared in less industrial detail, update the benchmark tables. Annual tables have been prepared starting with 1966; the most recent tables for 1984 were published in the November 1989 Survey. Articles that explain and use the input-output tables as tools of economic analysis also are published in the Survey. Special analyses are prepared of the impact on the various industries of changes in specified final demands, output of other industries, and prices.

9. Capital goods flow tables - Tables showing capital goods flows from producing to using industries are prepared for the same years as the benchmark input-output tables. The most recent capital goods flow tables are for 1977 and were published in the November 1985 Survey.

10. Employment and employee compensation tables - Tables showing the number of employees, compensation, wages and salaries, and supplements for each industry are prepared for the same years as the benchmark input-output tables. The most recent employment and employee compensation tables are for 1977 and were published in the November 1985 Survey.

11. Government budgets in the GNP framework - The Federal and State and local budgets prepared within the GNP framework provide a means of gauging the effect of government fiscal policies on the economy. Detailed reconciliations between this concept of the Federal budget and the President's budget are made on a quarterly basis and published in the July Survey. Estimates reflecting the policies underlying the Federal budget for the upcoming fiscal year are published in the February Survey.

12. Quarterly estimates of cyclically-adjusted budgets are prepared. These estimates show the Federal receipts, expenditures, surplus or deficit, and Federal debt that would be generated if the economy were growing without cyclical fluctuation. Estimates reflecting the current year's fiscal policies are published quarterly. Separate estimates of receipts, expenditures, and their functional distributions for State and local governments, are prepared annually and published in the Survey. An alternative measure of State and local government fiscal condition that is more useful for some types of analysis is prepared annually and published in the Survey.

13. Quarterly estimates of national defense purchases of goods and services are prepared in current and constant dollars. Measures of price change are calculated for approximately 130 detailed categories of purchases. Summary estimates are published monthly in the Survey as part of the GNP.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
INCREASE FOR 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
National economic accounts...	Pos./BA	154	$10,166	204	$13,718	+50	$3,552
	FTE/Obl.	140		181		+41	

Increased financing to stop the deterioration in the quality of the U.S. national economic accounts (+22 positions, +$1,927,000) - This request would provide funds to stop the deterioration in the quality of the GNP and other estimates in the U.S. national economic accounts. BEA's resources have been stretched too thin to maintain the quality of the estimates in the face of significant changes in the domestic and international economies and reductions in the quality and quantity of data sources. Deteriorating quality is a growing concern to users. The improvements that would be funded by the request are directly responsive to the President's endorsement of recommendations made to him by the Economic Policy Council's Report on Improving U.S. Economic Statistics.

This request is for funds to maintain and to strengthen the estimates in the existing U.S. national economic accounts in the areas where recent changes in the economy have been most significant and the source data the most inadequate. These improvements to the existing accounts also will be incorporated into the modernized and extended set of national economic accounts described in the accompanying request.

Part of this request will be used in BEA to develop improved methodologies and part will be used to reimburse the Census Bureau for the development and for the maintenance of source data.

In BEA, the request would provide funds to:

1. Develop improved measures of consumer expenditures on services and of output of service industries. Currently, estimates of several types of services are obtained by extrapolating the base year value with a measure of labor input that is not adjusted for changes in productivity -- a procedure that does not permit the result of increased productivity to be counted as output and thereby to be reflected in measured productivity. Such procedures would be either replaced with direct estimates of output or modified to incorporate allowances for productivity change developed from indirect evidence.

2. Develop measures of prices of "high tech" goods for use in deflating estimates of business fixed investment and estimates of imports and exports. The introduction of a price index for computers in 1985 was a substantial step forward in taking account of rapid technological change. However, there are other goods--such as semiconductors, communications equipment, and medical equipment that are affected by the same type of technical developments. These goods are not now adequately priced, and as a consequence the measured increases in output and productivity are understated.

3. Develop measures of the detailed types of goods and services purchased by State and local governments. This information is needed in order to have a sound basis for deflating State and local government purchases. It also will provide the basis for separating current and capital expenditures of State and local governments in the full set of government accounts in the modernized and extended set of accounts.

4. Develop measures of the activities of the nonprofit sector. Currently the national economic accounts do not show information on the nonprofit sector. Nonprofit institutions are included in the personal sector; their expenditures are commingled with consumer expenditures and their income and its sources are not identifiable. Measures of the activities of the nonprofit sector will shed light on their income, including unrelated business income, and will improve the measure of consumer expenditures.

These funds would also provide for speeding up the compilation of the annual input-out (I-O) tables. Currently, the annual tables are being computed with lags of 4 to 6 years. The lags can be cut to 2 to 3 years, permitting I-O information to be incorporated each year in the revisions of annual estimates of personal consumption expenditures and business fixed investment in the GNP as well as in the measures of GNP by industry. Incorporating this information in the annual revisions will significantly improve the accuracy and reduce the large revisions that now come about every 5 years in the comprehensive revision of GNP. These improvements in output measures will in turn provide improved measures of total and industry productivity.

The Bureau of Economic Analysis will reimburse the Census Bureau for:

1. Research designed to develop a way to measure nonresidential construction prices directly by means of a statistical survey. Research is necessary to establish the most feasible method to obtain data on construction prices and to prepare a price index suitable for the deflation of current-dollar construction expenditures in GNP. Currently, privately prepared cost indexes are used to prepare a deflator. The low rate of measured productivity advance for the construction industry suggests that these private indexes are very inadequate, and are not expected to improve. To improve the measurement of construction, it is necessary first to carry out research to establish a feasible approach and then to collect the necessary information by means of statistical survey. This request is for the research.

2. Continuation of Current Industrial Reports used in the estimation of GNP, particularly for business fixed investment, and of GNP by industry. The Census Bureau proposes to eliminate these reports in FY 1991; their absence will reduce substantially the accuracy of the GNP estimates.

	1991	1992	1993	1994	1995
Direct Obligation	1,927	927	927	927	927
Budget Authority	1,927	927	927	927	927
Outlays	1,715	927	927	927	927
Positions	22	17	17	17	17
FTE	18	13	13	13	13

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Economic Analysis
Subactivity: National economic accounts
Program Change: Increased financing to stop the deterioration in the quality of the U.S. national economic accounts.

Object Class		1991 Increase/ (Decrease) Obligation	1991 Increase/ (Decrease) Budget Auth
11	Personnel compensation		
11.1	Full-time permanent	558,320	558,320
11.3	Other than full-time permanent	0	0
11.5	Other personnel compensation	27,600	27,600
11.8	Special personnel services payments	0	0
11.9	Total personnel compensation	585,920	585,920
12.1	Civilian personnel Benefits	137,192	137,192
13	Benefits for former personnel	0	0
21	Travel and transportation of persons	0	0
22	Transportation of things	0	0
23.1	Rental payments to GSA	155,000	155,000
23.2	Rental payments to others	0	0
23.3	Communications, utilities and miscellaneous charges.	14,729	14,729
24	Printing and reproduction	10,337	10,337
25	Other services	893,600	893,600
26	Supplies and materials	32,145	32,145
31	Equipment	98,077	98,077
32	Lands and structures	0	0
33	Investments and loans	0	0
41	Grants, subsidies and contributions	0	0
42	Insurance claims and indemnities	0	0
43	Interest and dividends	0	0
44	Refunds	0	0
99	Total	1,927,000	1,927,000

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Analysis
Subactivity: National economic accounts
Program Change: Increased financing to stop the deterioration in the quality of the U.S. national economic accounts.

Title:	Grade	Number	Annual Salary	Total Salaries
Supervisory Economist	15	1	61,289	61,289
Supervisory Economist	14	2	52,104	104,208
Economist	13	2	44,092	88,184
Economist	12	3	37,079	111,237
Economist	9	6	25,570	153,420
Economist	7	4	20,902	83,608
Administrative Assistant	7	2	20,902	41,804
Secretary	5	2	18,564	37,128
Total		22		680,878
Less lapse		4		122,558
Total full-time permanent: Obligations		18		558,320

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	18
Other than full-time permanent	
Total	18
Authorized Positions:	
Full-time permanent	22
Other than full-time permanent	
Total	22

Increased financing to modernize and extend the U.S. national economic accounts (+28 positions, +$1,625,000) - This request would provide funds to bring the U.S. national economic accounts into line with international guidelines. Unless the accounts are modernized and extended, they will become increasingly inadequate as a basis for analysis and policy formulation dealing with, for example, investment to increase productivity and competitiveness, allocation of resources, and structural changes. Further, because policy is increasingly formulated in an international setting, it has become more important for the national economic accounts--which provide measures of economic growth, inflation, and other key policy variables--to be comparable across countries.

The United Nations System of National Accounts (SNA) is the major set of international guidelines in national economic accounting. Other major Western nations--including Great Britain and Canada, which had cooperated with the United States in developing economic accounts during World War II--already follow the UN system. In the early 1990's, a revision of the UN system, the major outlines of which are already clear, will be introduced around the world. This revision is co-sponsored by the UN and four other international organizations, including the IMF and OECD. It is based on a worldwide review of progress in economic accounting over the last 20 years and of needs for domestic and cross-country analysis and policy formulation. The time is opportune for the United States to take advantage of the substantial body of expertise vested in the revised SNA.

This FY 1991 request is to provide funds for the first phase of a U.S. move to that system. Although the U.S. national income and product accounts are similar to corresponding parts of the SNA, the SNA provides a more comprehensive picture of the economy. Moving to the SNA requires both development of additional accounts and reworking of many parts of the existing accounts. Thus, the move is a major initiative. The requested increase has two parts.

The first part is to establish a special staff to plan and carry out a move to the revised SNA in the 1995 comprehensive revision of the national accounts. The staff would evaluate the specific guidelines in the revised SNA and develop general strategies to adapt the guidelines to the U.S. economy and statistical system. Then, within that structure, the staff would develop the estimating methodologies and identify the additional source data that will be required. Finally, they would introduce the concepts, accounting framework, and estimates to the government and private users of the accounts to provide an orderly transition to the SNA-based accounts.

The second part is for two specific projects to extend the existing accounts in the direction called for by the SNA. The extensions would strengthen the accounts in areas of growing policy concern and where advances in economic analysis have indicated major need.

The first project is to extend the U.S. national economic accounts to include, as the SNA does, a full set of accounts for the household, business, government, and rest-of-the-world sectors. The extension would consist of adding saving-investment accounts, capital finance accounts (sources and uses of funds), and revaluation accounts (price-change adjustments), and end-of-year balance sheets. With the extension, the U.S. accounts would provide integrated current and capital accounts, including balance sheets, for each sector and for the Nation as a whole. Analysis and policy formulation would be strengthened by a foundation built on a comprehensive, rather than partial, picture of transactions related to production, income distribution and redistribution, saving, lending, and investment and on information about the balance-sheet impact of these transactions and price-change adjustments.

The estimates of the newly integrated accounts would be built from BEA's domestic fixed capital stock estimates and international investment position estimates plus information from other agencies (mainly the Federal Reserve Board). Because the international investment data will play a key role, the separate request for increased financing to improve these data also supports this work. By the end of FY 1991, a provisional set of accounts for the rest-of-the-world sector would be completed. The provisional set would be revised in the following years as accounts for the other sectors are completed.

The second project is to extend the U.S. national economic accounts to include accounts designed to cut across the sectors and incorporate additional information to give a full picture by function or area. These extensions would provide interim improvements in areas of growing policy concern and where advances in economic analysis have indicated major need. These accounts, to be called satellite accounts in the revised SNA, provide a needed new dimension to the central framework of the national accounts. Because these accounts cut across sectors and incorporate additional information, they are vital to analysis and policy formulation faced with the need to allocate resources among competing demands. Because they are flexibly structured, they can be tailored to the individual country's setting. BEA's existing accounts for pollution abatement and control pioneered in the development of such accounts. Further development of such accounts would make a major contribution to the analysis of some of the problems that loom large in the 1990's and beyond.

The initial work would be for R&D. Outlays on R&D enhance the Nation's productive capacity. These accounts would go beyond currently available data to include constant-dollar estimates and would provide an alternative framework in which R&D outlays will be treated as capital formation (as the revised SNA will do). In this framework, the estimates could be used to obtain a better understanding of economic growth and policy needed to support it.

	1991	1992	1993	1994	1995
Direct Obligation	1,625	1,625	1,625	1,625	1,625
Budget Authority	1,625	1,625	1,625	1,625	1,625
Outlays	1,446	1,625	1,625	1,625	1,625
Positions	28	28	28	28	28
FTE	23	23	23	23	23

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: National economic accounts
Program Change: Increased financing to modernize and extend the U.S. national economic accounts.

Object Class		1991 Increase/ (Decrease) Obligation	1991 Increase/ (Decrease) Budget Auth
11	Personnel compensation		
11.1	Full-time permanent	862,982	862,982
11.3	Other than full-time permanent	0	0
11.5	Other personnel compensation	27,600	27,600
11.8	Special personnel services payments	0	0
11.9	Total personnel compensation	890,582	890,582
12.1	Civilian personnel Benefits	192,667	192,667
13	Benefits for former personnel	0	0
21	Travel and transportation of persons	20,000	20,000
22	Transportation of things	0	0
23.1	Rental payments to GSA	134,000	134,000
23.2	Rental payments to others	0	0
23.3	Communications, utilities and miscellaneous charges	13,700	13,700
24	Printing and reproduction	0	0
25	Other services	225,494	225,494
26	Supplies and materials	35,200	35,200
31	Equipment	113,357	113,357
32	Lands and structures	0	0
33	Investments and loans	0	0
41	Grants, subsidies and contributions	0	0
42	Insurance claims and indemnities	0	0
43	Interest and dividends	0	0
44	Refunds	0	0
99	Direct obligations	1,625,000	1,625,000

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Analysis
Subactivity: National economic accounts
Program Change: Increased financing to modernize and extend the U.S. national economic accounts

Title:	Grade	Number	Annual Salary	Total Salaries
Supervisory Economist (SES)	4	1	96,624	96,624
Economist	15	2	61,289	122,578
Economist	14	4	52,104	208,416
Economist	13	2	44,092	88,184
Economist	12	4	37,079	148,316
Economist	11	6	30,937	185,622
Economist	9	3	25,570	76,710
Programmer	7	3	20,902	62,706
Secretary	7	2	21,598	43,196
Secretary	6	1	20,065	20,065
Total		28		1,052,417
Less lapse		5		189,435
Total full-time permanent: Obligations		23		862,982

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	23
Other than full-time permanent	
Total	23
Authorized Positions:	
Full-time permanent	28
Other than full-time permanent	
Total	28

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: International economic accounts

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Balance of payments	Pos./BA	63	3,631	66	3,800	66	4,044	82	5,134	16	1,090
	FTE/Obl.	60	3,607	59		59		72		13	
International investment and international services estimates	Pos./BA	73	3,344	73	3,390	73	3,629	103	5,982	30	2,353
	FTE/Obl.	64	3,551	63		63		88		25	
Direct Obligations	Pos./BA	136	6,975	139	7,190	139	7,673	185	11,116	46	3,443
	FTE/Obl.	124	7,158	122		122		160		38	

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Economic Analysis
Subactivity: International economic accounts

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and analysis of the economic accounts of the United States.

Objectives: To maintain and improve the system of international economic accounts. The international economic accounts consist of the balance of payments accounts, which give detail on U.S. transactions with foreign countries, and the international investment and international service estimates.

Base Program

Balance of payments accounts - This work consists of the preparation, development, and analysis of the balance of payments accounts, which provide a comprehensive and detailed view of economic transactions between the United States and foreign countries. Major types of transactions covered are merchandise trade; travel, transportation, and private services; income on international investment; U.S. Government military and other services; private remittances; foreign aid programs; private capital flows; and changes in foreign official assets in the United States and U.S. official reserve assets. More specifically, the output consists of the following:

1. Balance of payments estimates - Estimates containing all major components of the balance of payments accounts, including regional and country breakdowns, are published quarterly in the Survey. The regional and country breakdowns consist of bilateral balance of payments estimates for the European Communities; United Kingdom; total Western Europe; Eastern Europe; Canada; Latin American Republics and other Western Hemisphere countries; Japan; other countries in Asia and Africa; Australia; and international organizations.

   Balance of payments quarterly estimates are released to the public about 12 weeks after the end of the quarter and are published in the Survey in the third month after the end of the quarter. Regular quarterly articles on the balance of payments also are published in the Survey. These analyze current developments in the U.S. balance of payments, changes in the foreign exchange value of the U.S. dollar, and the economic developments here and abroad that affect them.

   Preliminary annual estimates for the preceding year are published in the March Survey. Estimates for at least the 3 most recent years are revised on the basis of more comprehensive information and are published in the June Survey.

   Annual bilateral balance of payments accounts for Mexico, Venezuela, Belgium-Luxembourg, the Netherlands, France, West Germany, Italy, and South Africa are published in the June Survey. The bilateral accounts with members of the Organization of Petroleum Exporting Countries are published annually in either the March or June Survey. The U.S. balance of payments current account with Canada is reconciled with Canadian data, and the results are published in the Survey.

Short-term projections of various balance of payments components are prepared at least four times a year for Government use, in collaboration with an interagency committee.

2. Special analyses - Special analyses of current developments related to the balance of payments are prepared. Examples are the effects of changes in exchange rates and prices on U.S. trade, the impact of petroleum transactions on the balance of payments, and appraisals of the balance of payments presentations.

3. Merchandise trade - Special estimates of foreign trade data on a balance of payments basis are maintained which show consistent time series for commodities classified by end-use categories. Estimates of merchandise trade on a balance of payments basis are released to the public about 12 weeks after the end of the quarter and are published in the *Survey* in the third month after the end of the quarter. Monthly estimates are prepared for internal use.

4. International travel, transportation, and other services - Detailed estimates of receipts and payments arising from international travel and transportation, military expenditures and sales, and of a number of other U.S. Government and private service transactions and private remittances are prepared for the balance of payments accounts. These estimates are published quarterly in the *Survey*. An article providing annual detailed information on travel by country and by type of travel usually is published in the May *Survey*.

5. Government grants and credits - Quarterly estimates are prepared, giving information by program on grants, credits, and other assistance to foreign countries by the U.S. Government. These estimates are included in the quarterly balance of payments accounts. In addition, more detailed information is published primarily for use by the Congress and other Government agencies. These data are used to compile the official record of outflows to, and receipts from, foreign countries for Government aid and credit programs.

   Special compilation of Government grants and credits are prepared for OMB for use in the annual budget message and for the Department of the Treasury for use in annual reports on the international financial transactions of the Government. In addition, a detailed report is prepared annually for the use of the Development Assistance Committee of the OECD.

6. Private capital (other than direct investment) - Tabulations of banking and securities transactions and of corporate transactions with unaffiliated foreigners are prepared, and income on these investments is calculated. These estimates are included in the quarterly balance of payments accounts.

7. International investment position of the United States - Detailed annual estimates are prepared of the international assets and liabilities of the United States, changes in its net investment position, and factors accounting for these changes. These estimates, published in the June *Survey*, can be reconciled with the capital flows shown in the balance of payments accounts.

8. Special compilations of the balance of payments accounts - Special versions of the balance of payments accounts are prepared to fulfill the Government's commitment to provide information to the International Monetary Fund, the International Bank for Reconstruction and Development, the United Nations, and the OECD. These may differ in format and content from the official U.S. presentation.

International investment and international services estimates - The international investment work consists of the preparation, development, and analysis of estimates of U.S. direct investment abroad; foreign direct investment in the United States; income flows associated with these investments; and other economic aspects of multinational enterprises, including their trade, employment, taxes, and plant and equipment expenditures. The international services work consists of the preparation, development, and analysis of U.S. services transactions with both affiliated foreign persons (parents and affiliates) and unaffiliated foreign persons. More specifically, the output consists of the following:

1. Regular sample surveys - Quarterly surveys of U.S. direct investment abroad and of foreign direct investment in the United States are taken in order to obtain data on income and capital flows for inclusion in the quarterly balance of payments accounts. A summary presentation of the direct investment position at the end of each year is published in the June Surv[illegible] A more detailed annual recapitulation of the results of these surveys is published in the August Survey. These annual reports give detailed information by country and industry on equity and intercompany account flows, income, reinvested earnings, royalties and license fees, other services transactions, and the direct investment position at the end of each year.

   Semiannual surveys are taken of current and projected plant and equipment expenditures of foreign affiliates of U.S. firms. The results are published usually in the March and September Surveys.

   Annual surveys of foreign direct investment in the United States and of U.S. direct investment abroad gather other financial and operating data, such as on employment, sales, trade, property, plant, and equipment. The results of the annual survey of foreign direct investment in the United States covering 1986 were published in the May 1988 Survey. For 1987, the annual survey was replaced by the 1987 benchmark survey of foreign direct investment in the United States. The results of the 1986 annual survey of U.S. direct investment abroad were published in the June 1988 Survey; results of the 1987 survey were published in the June 1989 Survey.

2. Benchmark surveys - These surveys cover transactions between all U.S. parent organizations and their foreign affiliates, and between foreign parent organizations and their U.S. affiliates. Other economic information collected relating to U.S. parents and U.S. and foreign affiliates include sales of goods and services, trade, employment, balance sheets, and income statements. The estimates for these multinational companies from the benchmark surveys are shown seperately by industry, and by country, or region. The results of the benchmark survey of U.S. direct investment abroad for 1982 were summarized in the December 1985 Survey and also were published in detail as a special supplement in December 1985. A survey covering 1989 has been designed and is scheduled to be mailed out in March 1990. The results of the benchmark survey of foreign direct investment in the United States for 1980 were summarized in the October 1983 Survey and were published in detail as a special supplement in October 1983. Processing of the benchmark survey of foreign direct investment in the United States covering 1987 has been completed. A news release containing highlights of the survey was issued in June 1989. It was followed by an article in the July 1989 Survey and a detailed data publication in August 1989.

3. Services surveys - A benchmark survey of selected services transactions with unaffiliated foreign persons is conducted to obtain data, by country, on the following types of services: advertising; computer and data processing; data base and other information services; telecommunications; agricultural services; research and development, and commercial testing, laboratory services; management consulting and public relations; accounting, auditing, and bookkeeping; legal services; education and training services; mailing, reproduction, and commercial art; employment agencies; industrial engineering; industrial-type maintenance and repair, installation, and training; performing arts; direct insurance; and construction, engineering, architectural, and mining services. Selected data from the benchmark survey are updated in nonbenchmark years by means of an annual follow-on survey. Three other annual surveys of services transactions--the BE-47 (on construction, engineering, architectural, and mining services), the BE-48 (on insurance), and the BE-93 (on royalties and license fees)--are also conducted.

4. Multinational company activities - An information system is maintained which integrates the international and domestic data for multinational companies collected by BEA. This system provides for the production of organized and consistently defined information on U.S. companies and their foreign affiliates, and on foreign companies and their U.S. affiliates, at the needed level of detail, including data on type of ownership, industry, and country classification. Data are stored in accessible form and are organized to facilitate the matching of benchmark surveys against sample surveys, permitting efficient blowups of sample surveys to universe estimates. Analyses utilizing the data are published in the Survey covering such topics as the role of multinational companies and their foreign affiliates in U.S. international trade, the employment and payroll costs of multinational companies, and estimates of gross product (value added) of foreign affiliates of U.S. companies and of U.S. affiliates of foreign companies.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
INCREASE FOR 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Balance of payments..	Pos./BA	66	$4,044	82	$5,134	+16	$1,090
	FTE/Obl.	59		72		+13	

Increased financing to improve the quality of the balance of payments estimates and related analyses (+16 positions, +$1,090,000) - This request would provide funds to improve the quality of the balance of payments estimates and analyses. BEA's resources have been stretched too thin to maintain the quality of the estimates in the face of significant changes in the economy and in the quality and quantity of data sources. The improvements that would be funded are directly responsive to the President's endorsement of recommendations made to him by the Economic Policy Council's Report on Improving U.S. Economic Statistics.

This request is for funds to maintain and to strengthen the balance of payments and related estimates in areas where changes in international trade and investment have been very significant and the source data inadequate. The funds would be used to:

1. Measure the net international investment position of the United States at current values. In the present estimates, some types of investment are estimated using current values, while other types--particularly direct investment--are estimated using book values. Use of book values rather than current values seriously distorts estimates of the net international investment position.

2. Develop measures of two types of international services that are not yet adequately covered in the balance of payments. One type is international services provided by U.S. banks and other financial institutions for which fees are received. The work on fee (often called "noninterest") income would carry forward initial exploration done by an interagency work group. The other type is truck transportation to and from Canada and to and from Mexico. Because of deregulation of the trucking industry and the recent U.S.-Canadian free trade agreement, the volume of such service transactions is increasing. However, no estimates of these service transactions with Mexico are included in the balance of payments and those with Canada are based on an inadequate methodology.

3. Improve the methods for preparing short-term projections of the balance of payments accounts. Projections of services transactions and capital flows are most in need of work. These projections are used by the Interagency Balance of Payments Information Committee to brief policymakers on the prospects for the U.S. balance of payments.

	1991	1992	1993	1994	1995
Direct Obligation	1,090	490	490	490	490
Budget Authority	1,090	490	490	490	490
Outlays	970	490	490	490	490
Positions	16	11	11	11	11
FTE	13	8	8	8	8

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Economic Analysis
Subactivity: International economic accounts
Program Change: Increased financing to improve the quality of the balance of payments estimates and related analyses.

Object Class		1991 Increase/ (Decrease) Obligation	1991 Increase/ (Decrease) Budget Auth
11	Personnel compensation		
11.1	Full-time permanent	434,584	434,584
11.3	Other than full-time permanent	0	0
11.5	Other personnel compensation	10,800	10,800
11.8	Special personnel services payments	0	0
11.9	Total personnel compensation	445,384	445,384
12.1	Civilian personnel Benefits	101,321	101,321
13	Benefits for former personnel	0	0
21	Travel and transportation of persons	0	0
22	Transportation of things	0	0
23.1	Rental payments to GSA	64,000	64,000
23.2	Rental payments to others	0	0
23.3	Communications, utilities and miscellaneous charges	4,200	4,200
24	Printing and reproduction	30,230	30,230
25	Other services	424,200	424,200
26	Supplies and materials	12,805	12,805
31	Equipment	7,860	7,860
32	Lands and structures	0	0
33	Investments and loans	0	0
41	Grants, subsidies and contributions	0	0
42	Insurance claims and indemnities	0	0
43	Interest and dividends	0	0
44	Refunds	0	0
99	Total	1,090,000	1,090,000

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Analysis
Subactivity: International economic accounts
Program Change: Increased financing to improve the quality of the balance of payments estimates and related analyses.

Title:	Grade	Number	Annual Salary	Total Salaries
Economist	15	1	61,289	61,289
Economist	14	2	52,104	104,208
Economist	13	2	44,092	88,184
Statistician	12	1	37,079	37,079
Economist	11	1	30,937	30,937
Economist	9	5	25,570	127,850
Statistical Assistant	7	2	20,902	41,804
Secretary	6	1	20,065	20,065
Clerk-typist	5	1	18,564	18,564
Total		16		529,980
Less lapse		3		95,396
Total full-time permanent: Obligations		13		434,584

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	13
Other than full-time permanent	
Total	13
Authorized Positions:	
Full-time permanent	16
Other than full-time permanent	
Total	16

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
INCREASE FOR 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
International investment and international services estimates............	Pos./BA	73	$3,629	103	$5,982	+30	+$2,353
	FTE/Obl.	63		88		+25	

Increased financing to improve the quality of the international investment data (+30 positions, +$2,353,000) - This request would provide funds to improve the data for foreign direct investment in the United States and U.S. direct investment abroad. BEA's current resources are insufficient to make the improvements required to keep pace with the rapid growth in direct investment and the increasing public interest in information to monitor such investment.

This request would fund improvements in the quality of the data, its analysis, and the speed with which it is made available. Projects would:

1. Match BEA's data for foreign-owned U.S. business enterprises (i.e., companies) with the Census Bureau's data for the individual establishments (i.e., plants) of those enterprises. The computer-based matching would provide much more State and industry detail for foreign-owned enterprises than is currently available. These data are needed for examining the impact of foreign direct investment on the economies of individual States and on specific industries.

2. Improve compliance with the reporting requirements of BEA direct investment surveys (a) by increasing follow-up of companies that do not report or that report incomplete or inaccurate data, (b) by improving mailing lists, and (c) by publicizing the reporting requirements more fully. Obtaining compliance has become an increasingly serious problem at a time when accuracy and reliability of the data have become ever more important.

3. Strengthen BEA's ability to analyze the data collected. This is supported in part by reimbursements from special requests for information on direct investment but the reimbursements do not provide for the comprehensive analyses sought by Congress, other policymakers, and the general public. Outsiders cannot undertake analyses of the company-level data because of BEA's legal confidentiality requirements.

4. Publish data on U.S. businesses newly acquired or established by foreign direct investors on a more current basis--every 6 months, instead of once a year as at present. The more frequent publication is called for by the stepped up pace of foreign direct investment in the United States.

5. Complete the development of, and implement, an innovative interactive computerized edit system. The system would make it possible for BEA to process the direct investment survey data more quickly and efficiently.

	1991	1992	1993	1994	1995
Direct Obligation	2,353	1,953	1,953	1,953	1,953
Budget Authority	2,353	1,953	1,953	1,953	1,953
Outlays	2,094	1,953	1,953	1,953	1,953
Positions	30	26	26	26	26
FTE	25	21	21	21	21

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: International economic accounts
Program Change: Increased financing to improve the quality of the international investment data.

Object Class		1991 Increase/ (Decrease) Obligation	1991 Increase/ (Decrease) Budget Auth
11	Personnel compensation		
11.1	Full-time permanent	755,343	755,343
11.3	Other than full-time permanent	0	0
11.5	Other personnel compensation	19,600	19,600
11.8	Special personnel services payments	0	0
11.9	Total personnel compensation	774,943	774,943
12.1	Civilian personnel Benefits	170,474	170,474
13	Benefits for former personnel	0	0
21	Travel and transportation of persons	2,000	2,000
22	Transportation of things	0	0
23.1	Rental payments to GSA	95,000	95,000
23.2	Rental payments to others	0	0
23.3	Communications, utilities and miscellaneous charges	132,237	132,237
24	Printing and reproduction	76,050	76,050
25	Other services	977,000	977,000
26	Supplies and materials	24,078	24,078
31	Equipment	101,218	101,218
32	Lands and structures	0	0
33	Investments and loans	0	0
41	Grants, subsidies and contributions	0	0
42	Insurance claims and indemnities	0	0
43	Interest and dividends	0	0
44	Refunds	0	0
99	Direct obligations	2,353,000	2,353,000

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Analysis
Subactivity: International economic accounts
Program Change: Increased financing to improve the quality of the international investment data.

Title:	Grade	Number	Annual Salary	Total Salaries
Supervisory Economist	14	2	53,104	106,208
Economist	13	2	44,092	88,184
Economist	12	1	37,079	37,079
Economist/Accountant	12	2	37,079	74,158
Accountant	12	1	37,079	37,079
Computer Programmer	12	2	37,079	74,158
Economist/Accountant	11	3	30,937	92,811
Accountant	11	2	30,937	61,874
Accountant	9	3	27,149	81,447
Computer Programmer	9	5	25,570	127,850
Economist/Accountant	7	2	20,902	41,804
Computer Programmer	7	2	20,902	41,804
Secretary	6	2	20,065	40,130
Clerk Typist	5	1	18,544	18,544
Total		30		921,150
Less lapse		5		168,807
Total full-time permanent: Obligations		25		755,343

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	25
Other than full-time permanent	
Total	25
Authorized Positions:	
Full-time permanent	30
Other than full-time permanent	
Total	30

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: Regional economic accounts

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Regional economic measurement................	Pos./BA	54	2,573	54	2,612	54	2,774	54	2,774	0	0
	FTE/Obl.	41	2,577	47		47		47		0	
Regional economic analysis...................	Pos./BA	30	1,491	30	1,510	30	1,607	30	1,607	0	0
	FTE/Obl.	24	1,528	26		26		26		0	
Direct Obligations...........................	Pos./BA	84	4,064	84	4,122	84	4,381	84	4,381	0	0
	FTE/Obl.	65	4,105	73		73		73		0	

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Economic Analysis
Subactivity: Regional economic accounts

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and analysis of the economic accounts of the United States.

Objectives: To maintain and improve the system of regional economic measurement and analyses.

Base Program

Regional economic measurement - This work consists of the preparation, development, and analysis of economic accounts that show detail on economic activity by region, State, metropolitan area, and county. More specifically, the output consists of the following:

1. Personal income, by State - Annual estimates of personal income and disposable personal income by State and for the District of Columbia are prepared twice each year and published in the *Survey*, first in April on the basis of preliminary and incomplete data, and next in August when more reliable and detailed estimates can be made. The April issue contains preliminary estimates of total and per capita personal income, including percent changes in selected sources of personal income. Articles analyzing the changes in the geographic distribution of personal income are published periodically in the *Survey*. The August issue presents revised estimates of personal income subdivided by type of income and by major industry of origin.

   Quarterly estimates of total personal income by State are published in the *Survey* in the fourth month after the end of the quarter. Estimates of the 3 most recent years are revised on the basis of more comprehensive information and are published in the October *Survey*.

2. Personal income, by county - Annual estimates of total and per capita personal income are published in the April *Survey* for each of the more than 3,100 counties and county equivalents in the United States. A detailed breakdown of county personal income subdivided by type of income and by major industry of origin is published each summer in special supplements. These estimates constitute the only comprehensive and detailed economic series available annually on a local area basis.

3. Personal income, by metropolitan area - Annual estimates of total and per capita personal income are published in the April *Survey* for each of the designated metropolitan areas. Detailed estimates of personal income, subdivided by type of income and by major industry of origin for each metropolitan area, are published each summer in special supplements.

Regional economic analysis - This work consists of the preparation of analyses and projections of States and local areas. More specifically, the output consists of the following:

1. Regional, State, and local area economic analyses - Analyses are carried out to identify and measure the factors that determine area differences in levels and growth rates of total and per capita personal income and of industrially-detailed earnings, employment, and output. These analyses are needed to improve the techniques for preparing the State and local area economic projections, and to assess, in advance, the area effects of alternative development programs. Analyses are published in the Survey and in special supplements.

2. Regional, State, and local area economic projections - Projections of personal income, employment, gross product, earnings (of persons) by industrial source, and population are prepared every 5 years for each State and the District of Columbia and for all metropolitan areas. During the interim period, economic projections are made for selected State and local areas. Economic projections are published in the Survey and in special supplements.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Economic Analysis
Subactivity: Analysis of economic trends

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Economic outlook..............................	Pos./BA	51	2,521	51	2,556	51	2,721	51	2,721	0	0
	FTE/Obl.	35	2,300	37		37		37		0	
Current business analysis....................	Pos./BA	30	2,156	29	2,188	26	2,325	26	2,325	0	0
	FTE/Obl.	27	1,951	25		22		22		0	
Direct Obligations............................	Pos./BA	81	4,677	80	4,744	77	5,046	77	5,046	0	0
	FTE/Obl.	62	4,251	62		59		59		0	

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Economic Analysis
Subactivity: Analysis of economic trends

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and analysis of the economic accounts of the United States.

Objectives: To maintain and improve the measures and analyses that extend the usefulness of the economic accounts. These include econometric models of the U.S. economy, a system of business cycle indicators, and analyses of the economic situation.

Base Program

Economic outlook - This work consists of the preparation, development, and analysis of econometric model forecasts and simulations and a system of leading, coincident, and lagging business cycle indicators and of related data that help to depict current and future economic activity. More specifically, the output consists of the following:

1. Econometric model - Short-term forecasts of economic activity are made four times a year using a quarterly econometric model of the U.S. economy consisting of about 250 behavioral equations and 900 variables. Forecasts are distributed to policy makers within the Department and to more than two dozen other Federal agencies. In addition, econometric studies for special policy-oriented analyses are made on request and updated forecasts are provided to key policy-oriented agencies each month.

2. Business cycle indicators - Business Conditions Digest (BCD), a monthly compendium of economic indicators, presents approximately 300 monthly and quarterly seasonally adjusted economic time series, about 120 of which have been classified as cyclical indicators (i.e., series that conform well to broad fluctuations in aggregate economic activity). The cyclical indicators (classified as leading, roughly coincident, or lagging), the composite indexes derived from them, and related diffusion indexes have been recognized as useful tools for economic forecasting. The remaining series are useful in the interpretation of the economic situation and outlook but they do not qualify as cyclical indicators. Various analytical measures and summary characteristics of individual series also are shown. The series are shown in graphic and tabular form. In addition, the Handbook of Cyclical Indicators, published intermittently as a supplement to BCD, contains the composite index methodology, descriptions and historical data for BCD data series, and analytical measures for cyclical indicators. The latest edition was issued in 1984.

Current business analysis - This work consists of the preparation of analyses of the economic situation and outlook, the Survey, and the provision of information services. More specifically, the output consists of the following:

1. Analysis of the economic situation - analyses of current economic conditions and the near-term outlook are published in "The Business Situation" section of the Survey. These analyses are prepared within the framework of the economic accounts. A review and interpretation of the advance GNP estimates are published quarterly. In addition, analyses of specific aspects of the economic situation are published. Examples are: residential construction; the labor market; price changes; financial developments; and developments in particular industries, such as steel and autos, that have an important influence on short-term business activity

2. Statistics and explanatory notes are published monthly in the "S-pages" of the Survey. These carry approximately 1,950 separate series. Used in conjunction with the biennial Business Statistics supplements to the Survey, they provide continuous and consistent series running back many years and cover all major aspects of the economy. Most of the series are obtained from other Government agencies and from private organizations.

3. The biennial Business Statistics supplements provide back data for series published in the monthly issues of the Survey, most of them in the "S-pages." Explanatory notes define terms, give sources of data, and describe methods of compilation.

4. Preparation of the Survey - This includes the review and coordination of the layout, chartwork, and mechanics of preparing the copy of the Survey for the printer. Similar support is provided for other BEA publications.

5. Editorial and publications services - This includes the substantive and editorial review of all BEA monographs and press releases and the provision of publications production services.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Policy Support
Subactivity: Policy support

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Economic policy support........................	Pos./BA	39	2,829	37	2,870	37	3,090	37	3,090	0	0
	FTE/Obl.	53	2,744	36		36		36		0	
Business analysis................................	Pos./BA	39	2,417	37	2,427	40	2,597	40	2,597	0	0
	FTE/Obl.	30	2,190	25		28		28		0	
Office of strategic resources..................	Pos./BA	2	358	0	0	0	0	0	0	0	0
	FTE/Obl.	2	335	0		0		0		0	
Direct Obligations...............................	Pos./BA	80	5,604	74	5,297	77	5,687	77	5,687	0	0
	FTE/Obl.	85	5,269	61		64		64		0	

The Office of Strategic Resources was transferred in FY 1989 to the Technology Administration. Information on the program activities is contained in the budget justification for the Technology Administration, salaries and expenses appropriation.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Policy Support
Subactivity: Policy support

Goals and Objectives

Goals: To support the Secretary, Under Secretary, and other Government officials in interpreting the state of the economy, and on matters relating to economic policy.

Objective: To advise the Secretary, Under Secretary, and other Government officials on matters related to economic developments and forecasts, and the development of options and positions relating to both macroeconomic and microeconomic policy; and to support the Secretary's and the Under Secretary's participation in the Economic and Domestic Policy Councils, and in similar Administration economic policy forums.

Base Program

Economic policy support - The output consists of the following:

1. Reports, articles, and speeches on the economic situation are prepared, and regular and special studies on economic conditions and developments are conducted. Analyses include forecasts of aggregate economic activity, as well as reviews of current economic conditions in key sectors. Reports and analyses on policy issues of concern to the Secretary and the Under Secretary are prepared. Such issues include overall fiscal and monetary policy, tax policy, the sectoral implications of macro-level policies, micro-level impacts of legislation and regulation, and the impact of international policy trends on the domestic economy.

2. Information, analysis, and guidance on pending economic policy decisions are provided for the Secretary's and the Under Secretary's participation in the Economic and Domestic Policy Councils, in their working groups, and in similar Administration policy forums. In addition, policy proposals and staff papers are prepared for presentation by the Secretary and Under Secretary to these Councils and forums.

3. Detailed economic forecasts are provided for the Secretary's and Under Secretary's participation in interagency groups. These forecasts are prepared using independent estimating techniques, and they incorporate financial sector data and supply variables.

4. Material prepared by other Department of Commerce elements concerning the domestic economic situation is reviewed to ensure that it reflects the most accurate and timely information.

5. Assistance is provided to the Office of Public Affairs and other Commerce elements in responding to news media requests for economic information and interpretation of economic data.

6. Congressional testimony is prepared for the Under Secretary.

7. Participation in policy deliberations of the Organization for Economic Cooperation and Development (OECD) and the International Labor Organization (ILO) is provided.

Business analysis -The output consists of the following:

1. Analyses of the cross-industry effects of microeconomic developments, trends, proposed and current policies, and unique events, e.g., supply interruptions, strikes, natural disasters, emergency mobilization and industrial preparedness conditions, etc., are conducted.

2. Assessment of the impact of selected regulations and legislation on the business community are prepared.

3. Microeconomic research of contemporary industrial trends is conducted and supporting statistical data bases are developed.

4. Operates a computerized economic bulletin board and a data base system that provide the Government and the private sector with a single source of current economic statistics, such as the gross national product (GNP), the employment situation, personal income, the consumer price index, the Federal Reserve Board's monetary and financial data, and other economic information.

5. Operates the National Trade Data Bank, as required by the Omnibus Trade and Competitiveness Act of 1988, which collects data in electronic form from many Government agencies including Census, BEA, BLS, Agriculture, the Federal Reserve Board, and international agencies, and disseminates these data through a computerized distribution system.

6. Provides information to the public on the use of the Economic Bulletin Board and the National Trade Data Bank and refers users to the source agencies for information on the use of the data in these systems.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Productivity, Technology, and Innovation
Subactivity: Productivity, technology, and innovation

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Productivity, technology, and innovation	Pos./BA	31	1,683	0	0	0	0	0	0	0	0
	FTE/Obl.	14	1,683	0		0		0		0	
Federal technology management	Pos./BA	4	371	0	0	0	0	0	0	0	0
	FTE/Obl.	4	369	0		0		0		0	
Direct Obligations	Pos./BA	35	2,054	0	0	0	0	0	0	0	0
	FTE/Obl.	18	2,052	0		0		0		0	

The Office of Productivity, Technology, and Innovation and the Office of Federal Technology Management were transferred in FY 1989 to the Technology Administration. Information on the program activities is contained in the budget justification for the Technology Administration, salaries and expenses appropriation.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Japanese Technical Literature
Subactivity: Japanese technical literature

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Japanese technical literature................	Pos./BA	2	425	0	0	0	0	0	0	0	0
	FTE/Obl.	2	376	0		0		0		0	
Direct Obligations...........................	Pos./BA	2	425	0	0	0	0	0	0	0	0
	FTE/Obl.	2	376	0		0		0		0	

The Japanese Technical Literature program was transferred in FY 1989 to the Technology Administration. Information on the program activities is contained in the budget justification for the Technology Administration, salaries and expenses appropriation.

Department of Commerce
Economic and Statistical Analysis
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Reimbursable Program
Subactivity: Reimbursable program

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Federal funds............................	Pos./BA	63	1,700	63	1,505	67 1/	1,505	67	1,705	0	200
	FTE/Obl.	33	1,554	48		52 1/		52		0	
Non-federal sources......................	Pos./BA	4	590	4	389	4	395	4	395	0	0
	FTE/Obl.	4	447	4		4		4		0	
Reimbursable Obligations.................	Pos./BA	67	2,290	67	1,894	71	1,900	71	2,100	0	200
	FTE/Obl.	37	2,001	52		56		56		0	

1/ A Memorandum of Understanding was signed on August 15, 1989 transferring 4 permanent and 4 FTE positions from the Bureau of the Census to Economic and Statistical Analysis to support the development and operation of the National Trade Data Bank.

Department of Commerce
Economic and Statistical Analysis
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Activity: Reimbursable Program
Subactivity: Reimbursable program

Goals and Objectives

Goals: To provide economic and statistical data and analyses to other Federal agencies and to individuals and firms requesting such data.

Objectives: To provide, at cost, economic and statistical data and analyses to Federal agencies, which rely on the information to achieve their program objectives, and to any person, firm, or organization, public or private upon request.

Base Program

ESA upon request provides economic and statistical data and analyses on a reimbursable or advance payment basis to other Federal agencies, State and local government agencies, and the private sector. Fees are charged, and reimbursable agreements are established, when a special benefit is provided, i.e., a benefit to an identifiable recipient beyond that derived by the public at large. Fees and reimbursable agreements are priced to recover the full cost of providing the benefit. ESA's authorization to perform this work is 31 U.S.C. 686 and 15 U.S.C. 1526.

ESA's reimbursable activities consist of providing:

1. Development and operation of the National Trade Data Bank.
2. Support for activities related to oversight, congressional, and public affairs of the Census Bureau.
3. Special data tapes, documentation, bulletins, or reports on input-output and GNP by industry data.
4. Estimates of county money income and special retrievals of personal income and employment.
5. Special regional economic projections and analyses.
6. Training of foreign nationals in national economic accounting.
7. Economic Bulletin Board subscription service.
8. Special surveys, compilations, tabulations, and calculations of multinational corporate data.
9. Other special economic and statistical data.

Summary of Workload and Performance Measures

Number of Requests	1989 Actual		1990 Estimate		1991 Estimate	
	Fed.	Non-Fed.	Fed.	Non-Fed.	Fed.	Non-Fed.
Tasks						
1. Development and operation of the National Trade Data Bank	0	0	1	0	1	0
2. Support for activities related to oversight, congressional, and public affairs of the Census Bureau	1	0	1	0	1	0
3. Special data tapes, documentation, bulletins, or reports on input-output and GNP by industry data	5	683	6	710	11	710
4. Estimates of county money income and special retrievals of personal income and employment	11	791	9	700	15	700
5. Special regional economic projections and analyses	6	231	1	225	4	225
6. Training of foreign nationals in national economic accounting	0	39	0	30	0	30
7. Economic Bulletin Board subscription service	0	4	0	4	0	4
8. Special surveys, compilations, tabulations, and calculations of multinational corporate data	1	340	4	300	6	300
9. Other special economic and statistical data	15	1,209	5	1,230	8	1,230
Total, number of requests	39	3,297	27	3,199	46	3,199

Average Amount	1989 Actual		1990 Estimate		1991 Estimate	
	Fed.	Non-Fed.	Fed.	Non-Fed.	Fed.	Non-Fed.
Tasks						
1. Development and operation of the National Trade Data Bank	0	0	755,000	0	660,000	0
2. Support for activities related to oversight, congressional, and public affairs of the Census Bureau	280,000	0	350,000	0	350,000	0
3. Special data tapes, documentation, bulletins, or reports on input-output and GNP by industry data	63,588	115	13,375	150	13,375	150
4. Estimates of county money income and special retrievals of personal income and employment	23,151	38	11,233	71	11,233	71
5. Special regional economic projections and analyses	11,769	311	50,000	444	50,000	444
6. Training of foreign nationals in national economic accounting	0	3,509	0	5,000	0	5,000
7. Economic Bulletin Board subscription service	0	9,43[illegible]	0	11,250	0	11,250
8. Special surveys, compilations, tabulations, and calculations of multinational corporate data	200	35	750	27	750	27
9. Other special economic and statistical data	41,936	67	2,920	71	2,920	71
Total, average amount per request	39,807	136	50,146	171	33,771	171

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Direct Obligations in thousands)

Activity: Offsetting Receipts
Subactivity: Offsetting receipts

Objectives

Objectives: To record monies received from the sale of economic and statistical data and analyses to other Federal agencies, State and local government agencies, and the private sector.

Base Program

ESA's offsetting receipts consist of the monies received from the sale of economic and statistical data and analyses in the reimbursable account.

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
11	Personnel compensation			
11.1	Full-time permanent	20,097	22,709	2,612
11.3	Other than full-time permanent	621	621	0
11.5	Other personnel compensation	261	348	87
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	20,979	23,678	2,699
12.1	Civilian personnel benefits	3,118	3,718	600
13	Benefits for former personnel	0	0	0
21	Travel and transportation of persons	119	141	22
22	Transportation of things	1	1	0
23.1	Rental payments to GSA	2,519	2,967	448
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges	958	1,123	165
24	Printing and reproduction	475	591	116
25	Other services	4,244	6,764	2,520
26	Supplies and materials	330	435	105
31	Equipment	210	530	320
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	32,953	39,948	6,995
	Reimbursable Obligations	1,900	2,100	200
	TOTAL OBLIGATIONS	34,853	42,048	7,195

Personnel Data			
Full-Time Equivalent Employment:			
Full-time permanent	412	491	79
Other than full-time permanent	46	46	0
Total	458	537	79
Authorized Positions:			
Full-time permanent	494	590	96
Other than full-time permanent	37	37	0
Total	531	627	96

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	83	83	0
	Senior executive service	2,169	2,169	0
	General schedule	17,845	20,457	2,612
	Commissioned officers	0	0	0
	Wage board/wage marine	0	0	0
	Scientific & professional (P.L. 80-313)	0	0	0
	Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
	Examiners of trademark appeals (P.L. 98-622)	0	0	0
	Senior foreign service	0	0	0
	Foreign service staff	0	0	0
	Foreign service nationals	0	0	0
	Consultants & experts	0	0	0
	Students	0	0	0
	Subtotal	20,097	22,709	2,612
11.3	Other than full-time permanent			
	General schedule	618	618	0
	Wage board	0	0	0
	Experts & consultants	3	3	0
	Hourly	0	0	0
	Subtotal	621	621	0
11.5	Other personnel compensation			
	Overtime	29	29	0
	SES performance awards	44	44	0
	Cash awards	47	96	49
	Merit pay awards	131	169	38
	Other	10	10	0
	Subtotal	261	348	87

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
11.8	Special personnel services payments			
	Foreign service officers (State)	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
11.9	Total personnel compensation	20,979	23,678	2,699
12.1	Civilian personnel benefits			
	Civil service retirement	1,024	1,265	241
	Federal employees' retirement	724	895	171
	Thrift savings plan	93	113	20
	Federal insurance contribution act	636	804	168
	Health insurance	562	562	0
	Life insurance	59	59	0
	Employees' compensation fund	20	20	0
	Other	0	0	0
	Subtotal	3,118	3,718	600
13	Benefits for former personnel			
	Severance pay	0	0	0
	Unemployment compensation	0	0	0
	Other	0	0	0
	Subtotal	0	0	0

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
21	Travel and transportation of persons			
	Common carrier	53	62	9
	Mileage	0	0	0
	Per diem/actual	64	77	13
	Vehicular	0	0	0
	Other	2	2	0
	[Overseas estimates]	0	0	0
	Subtotal	119	141	22
22	Transportation of things	1	1	0
	[Overseas estimates]	0	0	0
23.1	Rental payments to GSA	2,519	2,967	448
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	444	567	123
	Rental of office copying equipment	49	49	0
	Other equipment rental	14	14	0
	Federal telecommunications system	81	99	18
	Other telecommunications services	131	145	14
	Postal Service by USPS	144	154	10
	Other	95	95	0
	[Overseas estimates]	0	0	0
	Subtotal	958	1,123	165
24	Printing and reproduction			
	Publications	334	408	74
	Public use forms	48	55	7
	Envelopes	5	5	0
	Other	88	123	35
	[Payments to GA, WCF]	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	475	591	116

Mr. DWYER. Here to testify in support of this request is Michael R. Darby, Under Secretary for Economic Affairs. Since this is your first appearance before the Committee, we will insert your biographical sketch into the record at this point and your fingerprints, and then you may proceed with your statement. [Laughter.]

[The biography of Mr. Darby follows:]

BIOGRAPHY OF MICHAEL R. DARBY, UNDER SECRETARY FOR ECONOMIC AFFAIRS

Michael R. Darby was confirmed as Under Secretary of Commerce for Economic Affairs on May 17, 1989. He succeeded Robert Ortner.

The Under Secretary for Economic Affairs is in charge of the department's economic and statistical programs. The Office of Economic Affairs includes the Bureau of the Census and the Bureau of Economic Analysis.

Mr. Darby had been Assistant Secretary for Economic Policy at the Treasury Department since mid-1986. Before coming to the Treasury, he had been a professor of economics at the University of California at Los Angeles (UCLA) for eight years. He was an associate professor of economics from 1973 to 1978 at UCLA, a visiting assistant professor in 1972-73, and an assistant professor of economics at Ohio State University from 1970 to 1973.

His professional activities include serving as the editor of the *Journal of International Money and Finance* from 1981 to 1986. He has been a member of the editorial board of that Journal since 1986 and of the *American Economic Review* from 1983 to 1987. He was a research associate of the National Bureau of Economic Research from 1976 to 1986, and a vice president and director of Paragon Industries from 1964 to 1982. He has served on the Executive Committee of the Western Economic Association since 1987.

Mr. Darby has written numerous articles and books on money and banking, macroeconomics, and international finance. He is listed in *Who's Who in Economics.* He has been honored as a National Science Foundation Graduation Fellow (1967-69), Lilly Honor Fellow (1967-70) and Federal Deposit Insurance Corporation Graduate Fellow (1969-70). He recently received the Treasury Department's highest honor, the Alexander Hamilton Award, in recognition of his distinguished leadership and service.

Mr. Darby received his Ph.D. in economics from the University of Chicago in 1970 and his M.A. in 1968. He was a Senior Fellow of Dartmouth College and graduated summa cum laude with an A.B. in 1967.

He was born November 24, 1945, in Dallas, Texas. He is married to the former Joanne T. (Jaye) Smith and has two children.

Mr. DARBY. Thank you, Mr. Chairman.

This is my first opportunity to appear before the subcommittee, and I am quite pleased to be here.

I am here today to present our fiscal year 1991 budget request. While Economic Affairs is a single organization, we do have two separate budgets, Economic and Statistical Analysis and Census.

First I will comment on the request for the ESA account. Joining me are Allan Young, Director of the Bureau of Economic Analysis; and Jerome Jackson, our principal Administrative Officer.

When we finish with ESA, we will turn to the budget request for the Bureau of the Census. I will be joined by Barbara Bryant, Director of the Bureau of the Census; and Joseph Bellomo, head of the Census Budget Operation.

I would like to begin with a general point. In years past, my predecessors said that Economic Affairs' number one priority was to maintain the quality of economic and demographic statistics.

It is not clear to me that Economic Affairs was successful in doing so across the board. We gained ground in some areas but lost ground in others. On balance, I think we experienced erosion in the quality of our statistics if, for no other reason, than that they could not keep pace with an increasingly complex world.

I am not alone in this view. After a thorough review of the Federal Statistical System, the Economic Policy Council concluded that the system needed repair in some areas and strengthening in others. These conclusions echo those reached by the Office of Technology Assessment in its September 1989 background paper on *Statistical Needs For A Changing U.S. Economy.*

On January 25th, Michael Boskin, Chairman of the Council of Economic Advisers, with the President's endorsement, announced the Administration's program for improving the quality of economic statistics.

Mr. Chairman, the program increases included in our ESA budget and our Census budget can be traced directly back to the findings that gave rise to the President's program.

We believe they represent a much needed—you could even say overdue—investment in improving our understanding of how our economy and society function.

Turning now to the ESA budget, it is important to note that most of it, approximately 86 percent, is for the Bureau of Economic Analysis. A large portion of the Nation's most essential economic statistics are prepared and published by BEA. Some examples include the Gross National Product estimates, and the incoming and outgoing foreign direct investment estimates.

The 1991 ESA request represents a key component in the President's recently announced statistics initiative. The budget provides $39.9 million for the ESA salaries and expenses appropriation. Our request includes $2.0 million for adjustments to the base, $1.9 million to stop the deterioration in the quality of the U.S. national economic accounts, and $1.6 million to modernize and extend the U.S. national economic accounts.

This second effort will contribute to the most extensive changes in the accounts since World War II, and also to make them much more comparable with the national accounts of other nations.

Our request also includes $1.1 million to improve the quality of balance of payments estimates and related analyses, and $2.3 million to improve the quality of the international direct investment data. I think there is widespread agreement on the need for better information on our economic relations with the rest of the world and on direct investment. Our program proposals should give us the facts we need.

That concludes my statement, Mr. Chairman. My colleagues and I are prepared to answer your questions before moving on to the Census request.

[The prepared statement of Mr. Darby follows:]

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
25	Other services			
	Training:			
	University	44	72	28
	Office of personnel management	17	33	16
	Other	10	10	0
	Maintenance of equipment	287	287	0
	GSA reimbursable services	93	93	0
	ADP services	112	112	0
	Telecommunications services	0	0	0
	Payments to GA, WCF	1,758	2,005	247
	Other non-government contracts	234	327	93
	Non-government data purchases	196	316	120
	Government data purchases	1,493	3,509	2,016
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	4,244	6,764	2,520
26	Supplies and materials			
	Office supplies	115	141	26
	ADP supplies	150	212	62
	Other	65	82	17
	[Overseas estimates]	0	0	0
	Subtotal	330	435	105
31	Equipment			
	Office machines and equipment	35	111	76
	ADP hardware	150	370	220
	ADP software	25	49	24
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	210	530	320

Department of Commerce
Economic and Statistical Analysis
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	32,953	39,948	6.995
	Reimbursable Obligations	1,900	2,100	200
	TOTAL OBLIGATIONS	34,853	42,048	7,195

Department of Commerce
Economic and Statistical Analysis
Salaries and expenses

Average Grade and Salary

	1989 Actual	1990 Estimate	1991 Estimate
Average ES salary	$76,028	$76,395	$77,275
Average GS grade	10.79	10.80	10.71
Average GS salary	37,524	37,695	36,912
Average salary of ungraded positions	0	0	0

Department of Commerce
Economic and Statistical Analysis
Salaries and expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	$63	$25	$40
Management and professional services	209	195	195
Special studies and analyses	0	25	25
Management and support services for research and development	0	0	0
Total	272	245	260

Consulting services, management and professional services, and special studies and analyses are utilized to the extent that they provide a cost-effective source for special services where the cost of permanent employment or other substitutes would be higher.

Further, it is not practical for ESA to conduct its work in an insulated environment. Consulting and related services contribute to the overall stability of ESA's work by: (1) providing cross-checks to ESA's work; and (2) supplementing staff to investigate important issues or problems.

Department of Commerce
Economic and Statistical Analysis
Salaries and expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$156	$140	$152	$162
Pamphlets	14	16	35	35
Audiovisuals	3	3	4	4
Total	173	159	191	201

Bureau of Economic Analysis

This activity provides a clear picture of the U.S. economy through the preparation, development, and interpretation of the national income and product accounts, summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace the interrelationships among industrial markets; personal income and related economic series by geographic area; the U.S. balance of payments accounts and associated foreign investment accounts; and measures relating to environmental change within the framework of the national economic accounts. The work on the national economic accounts is supplemented by the preparation and analysis of other measures of business activity, including various tools for forecasting economic developments, such as econometric models of the U.S. economy, and a system of leading, coincident, and lagging economic indicators. The data and analyses prepared by this activity are disseminated mainly through its monthly publications, the Survey of Current Business, including periodic supplements to the Survey, and Business Conditions Digest, and also through the Economic Bulletin Board.

Business Analysis

This subactivity's responsibilities include (1) analyses of the cross-industry effects of microeconomic developments, trends, proposed and current policies, and unique events, e.g., supply interruptions, strikes, and natural disasters; (2) assessments of the impact of selected regulations and legislation on the business community; (3) microeconomic research of contemporary industrial trends and supporting statistical data bases; and (4) the development and operation of the Department's Economic Bulletin Board and the National Trade Data Bank (funded reimbursably from Census).

PREPARED STATEMENT BY MICHAEL R. DARBY
UNDER SECRETARY FOR ECONOMIC AFFAIRS

BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE
FEBRUARY 28, 1990

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, THIS IS MY FIRST OPPORTUNITY TO APPEAR BEFORE THE SUBCOMMITTEE AND I AM QUITE PLEASED TO DO SO. I AM HERE TODAY TO PRESENT OUR FISCAL YEAR 1991 BUDGET REQUEST. WHILE ECONOMIC AFFAIRS IS A SINGLE ORGANIZATION, WE DO HAVE TWO SEPARATE BUDGETS: ECONOMIC AND STATISTICAL ANALYSIS, OR ESA, AND CENSUS.

FIRST, I WILL COMMENT ON THE REQUEST FOR THE ESA ACCOUNT. JOINING ME ARE ALLAN YOUNG, DIRECTOR OF THE BUREAU OF ECONOMIC ANALYSIS, AND JEROME JACKSON, OUR PRINCIPAL ADMINISTRATIVE OFFICER. WHEN WE FINISH WITH ESA, WE WILL TURN TO THE BUDGET REQUEST FOR THE BUREAU OF THE CENSUS. I WILL BE JOINED BY BARBARA BRYANT, DIRECTOR OF THE BUREAU OF THE CENSUS, AND JOSEPH BELLOMO, HEAD OF CENSUS' BUDGET OPERATIONS.

I WOULD LIKE TO BEGIN WITH A GENERAL POINT. IN YEARS PAST MY PREDECESSORS SAID THAT ECONOMIC AFFAIRS' NUMBER ONE PRIORITY WAS TO MAINTAIN THE QUALITY OF ECONOMIC AND DEMOGRAPHIC

STATISTICS. IT IS NOT CLEAR TO ME THAT ECONOMIC AFFAIRS WAS SUCCESSFUL IN DOING SO ACROSS THE BOARD. WE GAINED GROUND IN SOME AREAS BUT LOST GROUND IN OTHERS. ON BALANCE, I THINK WE EXPERIENCED EROSION IN THE QUALITY OF OUR STATISTICS, IF FOR NO OTHER REASON THAN THAT THEY COULD NOT KEEP PACE WITH AN INCREASINGLY COMPLEX WORLD.

I AM NOT ALONE IN THIS VIEW. AFTER A THOROUGH REVIEW OF THE FEDERAL STATISTICAL SYSTEM, THE ECONOMIC POLICY COUNCIL CONCLUDED THAT THE SYSTEM NEEDED REPAIR IN SOME AREAS AND STRENGTHENING IN OTHERS. THESE CONCLUSIONS ECHO THOSE REACHED BY THE OFFICE OF TECHNOLOGY ASSESSMENT IN ITS SEPTEMBER 1989 BACKGROUND PAPER ON STATISTICAL NEEDS FOR A CHANGING U.S. ECONOMY. ON JANUARY 25, MICHAEL BOSKIN, CHAIRMAN OF THE COUNCIL OF ECONOMIC ADVISERS, WITH THE PRESIDENT'S ENDORSEMENT, ANNOUNCED THE ADMINISTRATION'S PROGRAM FOR IMPROVING THE QUALITY OF ECONOMIC STATISTICS.

MR. CHAIRMAN, THE PROGRAM INCREASES INCLUDED IN OUR ESA BUDGET AND OUR CENSUS BUDGET CAN BE TRACED DIRECTLY BACK TO THE PRESIDENT'S PROGRAM AND TO THE FINDINGS THAT GAVE RISE TO THE PRESIDENT'S PROGRAM. WE BELIEVE THEY REPRESENT A MUCH NEEDED - YOU COULD EVEN SAY OVERDUE - INVESTMENT IN

IMPROVING OUR UNDERSTANDING OF HOW OUR ECONOMY AND SOCIETY FUNCTION.

TURNING NOW TO THE ESA BUDGET, IT IS IMPORTANT TO NOTE THAT MOST OF IT, APPROXIMATELY 86 PERCENT, IS FOR THE BUREAU OF ECONOMIC ANALYSIS (BEA). A LARGE PORTION OF THE NATION'S MOST ESSENTIAL ECONOMIC STATISTICS ARE PREPARED AND PUBLISHED BY BEA. SOME EXAMPLES INCLUDE THE GROSS NATIONAL PRODUCT ESTIMATES, AND THE INCOMING AND OUTGOING FOREIGN DIRECT INVESTMENT ESTIMATES.

THE 1991 ESA REQUEST REPRESENTS A KEY COMPONENT IN THE PRESIDENT'S RECENTLY ANNOUNCED STATISTICS INITIATIVE. THE BUDGET PROVIDES $39.9 MILLION FOR THE ESA SALARIES AND EXPENSES APPROPRIATION. OUR REQUEST INCLUDES $2.0 MILLION FOR ADJUSTMENTS TO THE BASE, $1.9 MILLION TO STOP THE DETERIORATION IN THE QUALITY OF THE U.S. NATIONAL ECONOMIC ACCOUNTS, AND $1.6 MILLION TO MODERNIZE AND EXTEND THE U.S. NATIONAL ECONOMIC ACCOUNTS. THIS SECOND EFFORT WILL CONTRIBUTE TO THE MOST EXTENSIVE CHANGES IN THE ACCOUNTS SINCE WORLD WAR II AND ALSO TO MAKE THEM MUCH MORE COMPARABLE WITH THE NATIONAL ACCOUNTS OF OTHER NATIONS.

OUR REQUEST ALSO INCLUDES $1.1 MILLION TO IMPROVE THE QUALITY OF BALANCE OF PAYMENTS ESTIMATES AND RELATED ANALYSES AND $2.3 MILLION TO IMPROVE THE QUALITY OF THE INTERNATIONAL DIRECT INVESTMENT DATA. I THINK THERE IS WIDESPREAD AGREEMENT ON THE NEED FOR BETTER INFORMATION ON OUR ECONOMIC RELATIONS WITH THE REST OF THE WORLD AND ON DIRECT INVESTMENT. OUR PROGRAM PROPOSALS SHOULD GIVE US THE FACTS WE NEED.

THAT CONCLUDES MY STATEMENT, MR. CHAIRMAN. MY COLLEAGUES AND I ARE PREPARED TO ANSWER YOUR QUESTIONS BEFORE MOVING ON TO THE CENSUS REQUEST.

Mr. **Dwyer**. Thank you, Mr. Darby.

Those bells were for our votes so when Mr. Smith comes back, I will be going. Don't let it confuse you.

FY 1991 REQUEST TO OMB

What was your request to OMB for your budget, what was your original request?

Mr. **Darby**. The request that went to OMB was $39 million.

Mr. **Dwyer**. So they really didn't cut you at all. You asked for $39,000,000 and they gave you $39,948,000.

Mr. **Darby**. Well, between the time the request went to OMB and the time the decision was made, I believe that the Economic Policy Council's analysis and report came through. And the importance of this initiative became clear.

QUALITY OF ECONOMIC STATISTICS

Mr. **Dwyer**. In your statement, you said that the number one priority for ESA was to maintain the quality of economic and demographic statistics. It was not clear that you were successful in doing so across the board.

Would you tell us where you gained ground and lost ground? I think you made that statement.

Mr. **Darby**. Okay. I'll do my best.

I think that we gained ground, for example, in the international investment area in the last several years. Now, we are in a process where that ground can be lost. The compliance with the survey has fallen. In fact, we have made a reprogramming request, given that we can't do it all, to shift some resources, among other places, into trying to maintain the schedule and maintain the quality in that area. But it has improved.

I think the GNP data has gradually become less accurate for two reasons. One is that the basic source data, as the economy has changed, have not kept up with those changes. So that we have less adequate data, both in terms of scope and in terms of accuracy to go into the GNP estimates.

On the other hand, we've had the work force drop in BEA roughly from 470 to 370. We have not had adequate people to make as much investment as we have had depreciation in the techniques. As a result, last year, for example, we suspended one of our three major reports on GNP, the GNP by industry.

I think that I could go on. Retail sales, for example, is another problem. And if you would like me to go on, I will. But I think that——

Mr. **Dwyer**. That's just fine.

Mr. **Darby**. I think that it has been pervasive.

STOP THE QUALITY DETERIORATION AND MODERNIZE THE SYSTEM

Mr. **Dwyer**. In your Economic Analysis statement, you indicate you are requesting an increase of $1.9 million to stop the deterioration in the quality of the U.S. national economic accounts, and $1.6 million to modernize and extend the U.S. national economic accounts.

What is the difference between the two initiatives?

Mr. **Darby**. The first one, to stop the deterioration, is basically trying to do what we are doing already. That involves things like developing measures of prices for new goods, especially the high tech goods. We have done that with computers, but there are a lot of other areas of business investment where we haven't done that. Also, developing measures of activity in the nonprofit sector where we lack information. That's one notion.

The $1.6 million for extending the accounts is aimed to make the first steps towards making the accounts consistent between, on the one hand, the national income accounts and, on the other hand, the balance of payments accounts by putting in the linkages—in effect going from single to double-entry bookkeeping. And, more broadly, that will take us very close to meeting the international standards of the System of National Accounts.

When we get to that point, instead of having to reinvent the wheel and fund all the research and methodology ourselves, we will be able to use the international statistical community's research that underlies the system of national accounts. And we also will not have to, every time we try to compare our statistics with Japan's or the United Kingdom's or Germany's, make these various conversions because we will be on the same basis.

Mr. **Dwyer**. I have to go vote. Thank you.

Mr. **Darby**. Thank you, sir.

SEQUESTRATION

Mr. **Smith** [presiding]. As you know, we had to reduce your budget request last year—not just yours, everybody's. Almost all the departments and agencies got some reduction. How are you handling that?

Mr. **Darby**. Well, I think that the main way we've handled it is, if you will, by triage. It was clear that we couldn't do everything we were doing with that reduction.

We have proposed to our Appropriations Committees, a reprogramming to eliminate the econometric model and to consolidate and simplify the data that had been published in the *Business Conditions Digest* so that we could put out just one larger publication of the Survey of Current Business.

Mr. **Smith**. Are those two items that you don't get reimbursed for?

Mr. **Darby**. Yes, sir. That would free about 20 people to shift into the GNP and international accounts where, otherwise, we would face the threat of having to suspend more of the reporting of either the Gross National Product, or possibly go back on our schedule for getting out the international investment data.

Mr. **Smith**. In order to pass a supplemental, we have got to show there is a dire emergency and/or an offset. Have you proposed any offsets?

Mr. **Darby**. With the reprogramming we are attempting to eliminate the econometric model and just shift the people to doing other work.

Mr. **Smith**. I see.

Mr. **Darby**. So it is an offset.

Mr. **Smith**. Will it be the same number of dollars?

Mr. **Darby**. Same number of dollars, same number of people doing different jobs, concentrating on the highest priority.

Mr. **Smith**. Mr. Rogers?

ECONOMIC POLICY COUNCIL

Mr. **Rogers**. You mentioned the working group of the Economic Policy Council and their recommendations.

What was the impetus for that report?

Mr. **Darby**. Well, I think that there is a recognition in business and academic communities that the economic statistics had deteriorated. With that growing recognition, when the President was elected, he asked Mr. Michael Boskin, now Chairman Boskin, to join him from Stanford University. Correcting this deterioration was one of, if not the top of Mr. Boskin's priorities.

When I was asked to take this job, I thought that was one of the few things—to try and help repair the economic statistics—that would make any empirical economist feel compelled to come.

So it was a great honor to try and engage in this effort.

Mr. **Rogers**. How was it undertaken?

Mr. **Darby**. Secretary Brady organized a group with Mr. Boskin as chairman of the working group. Most of the major statistical agencies and users—we even got the Federal Reserve represented—participated in this group to try and see what we could do quickly to stop the deterioration and begin to repair the damage to the statistical system, and what we should be doing in the long run.

So that was looking at both what can be done on a cost-effective basis, and what are the most important problems.

The group got its report together in the late fall or very early winter, went to the President, and then Chairman Boskin last month reported the President's endorsement for this initiative. They are incorporated—at least the first steps—in this document.

The working group is continuing, and will be aiming to develop long range plans of what further can be done.

I think that realistically we're talking about a relatively small number of additional people, just in terms of what's available, and what's available in terms of the professional market and in terms of actual numbers. And so it is going to take time.

Mr. **Rogers**. Have the concerns principally been from within the Government or from the private sector, or where?

Mr. **Darby**. There's a consensus now. Within the Government there are concerns that the kind of problems we've seen could lead to major policy mistakes in monetary policy or elsewhere. That's a concern that's real. That concern is felt in the private sector since the private sector suffers very directly from such policy mistakes. It also has affected business planning.

The academic economic community has become increasingly aware that we know less than we thought we did. That may be the most dangerous thing, thinking that we know something that is not so.

Mr. **Rogers**. That's all, Mr. Chairman.

Mr. **Smith**. Okay. Thank you for coming, Mr. Darby.

[The following questions were submitted to be answered for the record:]

QUESTIONS SUBMITTED BY CONGRESSMAN SMITH

FY 1990 SEQUESTER

Question. How much was sequestered in the appropriation for FY 1990 and what is the impact of that reduction in your programs?

Answer. The FY 1990 Economic and Statistical Analysis appropriation was sequestered $242,000. As a result four positions will remain unfilled in the following areas; National economic accounts (1 position), analysis of business trends (1 position), International economic accounts (1 position), and Policy support (1 position).

U.N. SYSTEM OF NATIONAL ACCOUNTS

Question. In your statement you indicate that the second effort would make the national economic accounts much more comparable with the national accounts of other nations. What are the major differences between the U.S. national accounts and the national accounts of other nations?

Answer. The comparison that follows contrasts BEA's current system to the System of National Accounts (SNA), which is being developed as an international standard by the United Nations.

Current	SNA
No capital account for government—all purchases are expensed..	Capital account for government
No national balance sheets	National balance sheets reconciled with income accounts.
No functional detail on many problems that loom large in the 1990's and beyond such as R&D, pensions, education and training, health, and natural resources.	Allows functinoal detail in satellite accounts that cut across sectors.
Must be converted for international comparisons; idiosyncratic system requires extra U.S. investment in accounting research.	Basic international system—data directly comparable; can captialize on international research on national accounting.

BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT

Question. You are also requesting an increase of $1.1 million to improve the quality of the balance of payments estimates, and related analyses and an increase of $2.3 million to improve the quality of international direct investment data. Please give us some specific examples of the problems that you are trying to correct with these requested increases.

Answer. ESA will implement the following corrective actions in areas where methods are weak or the source data is inadequate. Problems to be addressed in the balance of payments accounts include the following:

The net international investment position is not measured consistently in current prices. Some types of investment—particularly direct investment—are estimated using book values. Consequently, the position does not accurately portray the relative sizes of U.S. investment abroad and foreign investment in the United States.

Although substantial progress has been made, gaps remain in the coverage of international services in the balance of payments. The two most substantial items that are not covered are (1) services provided by U.S. banks and other financial institutions for which fees are received and (2) truck transportation to and from Canada and Mexico. Also, the current quarterly estimates for many types of international services that are obtained as projections of annual survey results need strengthening.

Problems to be addressed in the international investment data include the following:

More detailed State and industry information on foreign direct investment in the United States is needed in order to fully assess the impact of such investment on the U.S. economy. Also, there is a demand for more promptly available and more frequent information on new acquisitions by foreigners.

Compliance rates in the international surveys have dropped some; this must be addressed. Resources are needed to restore and to maintain high levels of compliance.

BEA's capability to analyze the data it collects has diminished as resources have been shifted to keeping up with the increased workload. If the data are more fully analyzed, much can be learned about the costs and benefits of direct investment.

ECONOMIC POLICY

Question. What have been the consequences for policy makers as a result of not improving the quality of these estimates?

Answer. Policy analysis is depending on estimates that are mismeasured.

Examples of measurement problems:

BEA estimated the *net international investment position* of the United States for 1988 at a deficit of $533 billion. Other research suggests BEA's estimate may be overstated by as much as $300 to $500 billion.

Two years ago, when a major policy issue was whether the economy was overheated, *BEA's estimate of real GNP, based on 1982 dollars, was averaging more than one-half a percentage point higher than a measure based on more up-to-date dollars.* BEA was aware of the problem, but lacked funds to carry out needed calculations.

BEA's *overstatement of manufacturing's contribution to real GNP* over the last decade has distorted analyses of productivity. The problem was identified by outside researchers.

Estimates of international services that BEA introduced in June 1989 indicated that exports of services had been understated by 12 percent in 1988 and that imports of services had been understated by 7 percent. The deficit on the current account was $9 billion lower in 1988 than had been thought.

Mismeasurement is still waiting to be quantified in a number of areas, including: *underground economy, construction, price changes for high-tech goods, and international services provided by U.S. banks.*

BUDGET PRIORITIES

Question. How woud you rank each of the proposed program increases for FY 1991? What are your priorities?

Answer. ESA's proposed program changes represent a comprehensive package for improving its economic statistics. Two of the requests will provide resources to stop the deterioration of the quality of what the Bureau of Economic Analysis now does. The requests for the national economic accounts and the balance of payments estimates will be used to develop improved methodologies for estimates that have become inaccurate because of the rapidly changing nature of the economy.

The request to modernize and extend the national economic accounts calls for the United States to replace its present system of accounts with a new system based on the United Nation's System of National Accounts (SNA). The SNA provides a more powerful, more useful system of accounts that is being adopted by other major Western countries. Because the new system will be built upon the present system, first it is necessary to repair the foundation provided by the present system.

The foreign direct investment request will provide the resources to develop more State and industry detail for foreign owned enterprises, to improve survey compliance rates, and to respond to requests for information.

WEDNESDAY, FEBRUARY 28, 1990.

BUREAU OF THE CENSUS

WITNESSES

DR. MICHAEL R. DARBY, UNDER SECRETARY FOR ECONOMIC AFFAIRS
DR. BARBARA EVERITT BRYANT, DIRECTOR, BUREAU OF THE CENSUS
C. LOUIS KINCANNON, DEPUTY DIRECTOR, BUREAU OF THE CENSUS
JOSEPH P. BELLOMO, CHIEF, BUDGET DIVISION

Mr. SMITH. Next we will hear from the Bureau of the Census. Here to testify are Under Secretary Darby and Barbara Bryant, Director of the Census Bureau.

At this point we will insert the budget justifications submitted in support of this request.

[The justifications follow:]

Department of Commerce
Bureau of the Census

BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION

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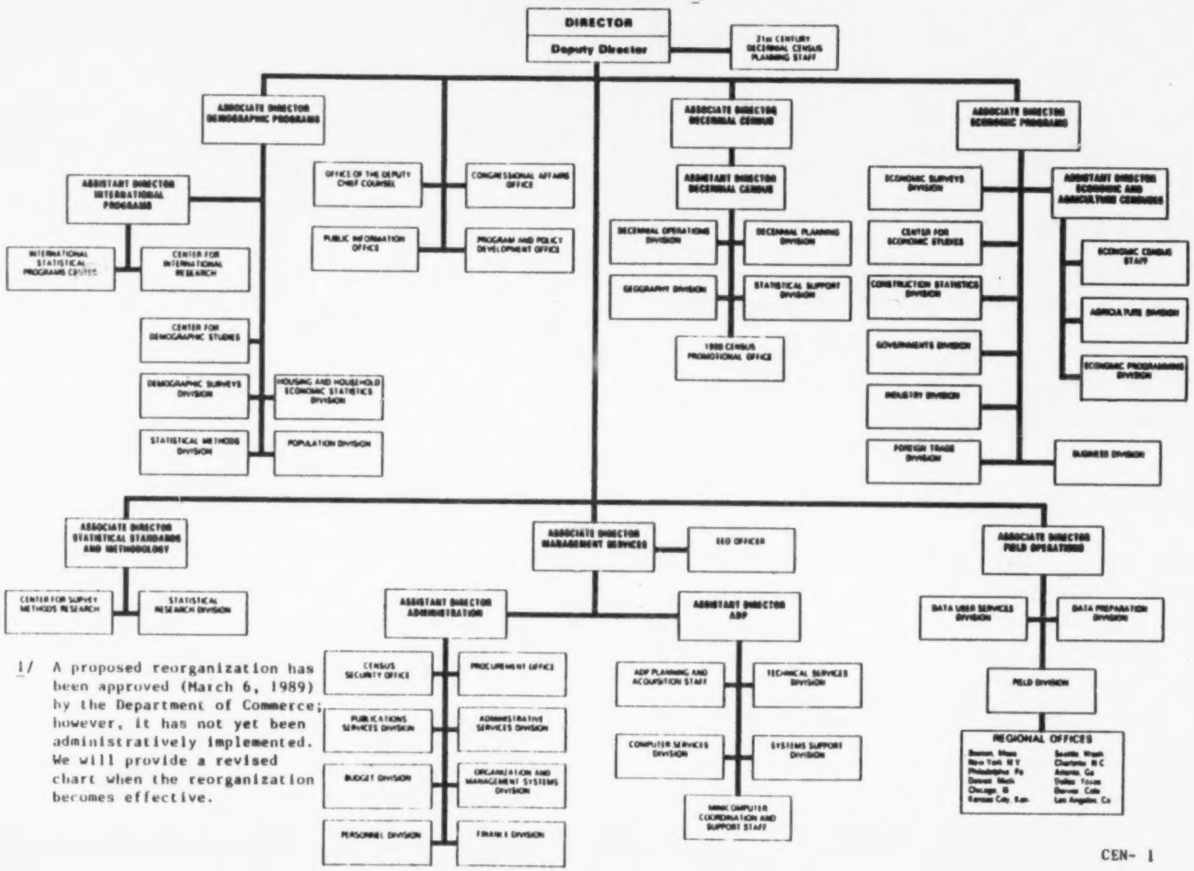
U.S. DEPARTMENT OF COMMERCE

Bureau of the Census 1/

March 1988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Los Angeles, Ca

1/ A proposed reorganization has been approved (March 6, 1989) by the Department of Commerce; however, it has not yet been administratively implemented. We will provide a revised chart when the reorganization becomes effective.

Department of Commerce
Bureau of the Census

GENERAL STATEMENT

The FY 1991 President's budget request for the Census Bureau is $431.3 million, 6,579 permanent positions, and 9,152 FTE. Compared to the FY 1990 enacted budget (adjusted for sequestration), the FY 1991 request represents a decrease of $983.4 million and 47,573 FTE. Of this decrease, nearly $993 million and 47,692 FTE are related to the reduction of Decennial Census activities; they are offset by approximately $11.7 million in program enhancements.

The following summary provides a comparison between the FY 1990 appropriation currently available and the FY 1991 estimate, and the related data on current employment.

(Dollars in thousands)

	1990 Currently avail.		1991 Estimate		Inc.(+)/Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Salaries and expenses....................	2,230	$99,890	2,402	$115,233	172	$15,343
Periodic censuses and programs...........	3,544	1,314,836	4,177	316,104	633	(998,732)
Total........................	5,774	1,414,726	6,579	431,337	805	(983,389)

The FY 1991 request reflects the immense statistical tasks facing the Census Bureau in the 1990's. It allows the Census Bureau to provide social, economic and trade statistics and analyses which will be accurate, timely and useful. It also allows the Bureau to seek quality improvements in its statistical data products, and to expand its capabilities to meet the ever-growing need for more data. The FY 1991 request includes completion of data collection activities for the 1990 Decennial Census, early planning and testing for the 2000 Decennial Census, improving demographic statistics, improving statistics on service-sector economic activity, and improving U.S. trade data.

In FY 1991, the major decrease in resources required reflects the transition of the Decennial Census from the highly labor-intensive field operations conducted in FY 1990 to processing, tabulation, and publication of data in FY 1991. While budget resources decrease significantly, the FY 1991 program is important because it is the year that we achieve our goals for delivering apportionment counts to the President and redistricting data to the states. FY 1991 is the first year that the official results of the 1990 census enumeration will be available to the public. We begin release of the 1990 census data products whose quality and timeliness depend on the success of the preparatory and census operations that preceded them.

In early FY 1991 we will complete the local review program which allows local officials to review and identify problems with the 1990 census counts. This is the last data collection operation, after which we will close the final set of district offices. Also, we will complete data capture operations and begin creating the data files that form the basis for all publications that will be released. The need for adequate resources in FY 1991 is critical, because delays could jeopardize our ability to meet our mandated deadlines and to ensure timely release of data products.

Highlights of FY 1991 request. The FY 1991 program changes for the Census Bureau by appropriation, and a brief summary of each of these current and periodic program changes are as follows:

Salaries and Expenses. For FY 1991 the budget request for the Census Bureau includes program changes totaling $10.0 million, 201 permanent positions, and 213 FTE for the Salaries and Expenses appropriation.

The FY 1991 budget request for the Salaries and Expenses appropriation includes five reductions to the base totalling 25 permanent positions, 25 FTE, and $1,225,000. In the Manufacturing Statistics subactivity, the base for Current Industrial Reports will be reduced by 5 permanent appointments, 5 FTE, and $222,000, and the base for Special Industrial Characteristics (the Survey of Plant Capacity Utilization) will be reduced by 7 permanent positions, 7 FTE, and $314,000. In the Government Statistics subactivity, the base for the Government Finance Survey will be reduced by 6 permanent positions, 6 FTE, and $209,000. In the Demographic Reports subactivity, the base for Population Estimates and Projections will be reduced by 7 permanent positions, 7 FTE, and $349,000. In the Data Systems Development subactivity, the base will be reduced by 0 permanent positions, 0 FTE, and $131,000.

Business Statistics (91 permanent positions, 91 FTE, and $3,910,000). Program improvements are requested in Current Retail Trade Reports, and Current Service Trade Reports.

Improvements to retail trade reports (19 permanent positions, 27 FTE, and $1,069,000). The Advance Monthly Retail Sales Survey (MARTS) provides advance retail sales estimates, based on early reporting by a small subsample of the larger monthly retail survey panel; it is a principal economic indicator. This program increase will improve the overall quality of the MARTS by reducing non-sampling problems, explore electronic reporting to accelerate response and reduce reporting burdens, reduce biases associated with telephone follow-up interviews, improve data editing, and perform content evaluation studies.

Improved and expanded service statistics (72 permanent positions, 64 FTE, and $2,841,000). Service industry data are critical to measure overall economic activity. This request provides needed improvements to Gross National Product (GNP) source data on services. This initiative is essential for improving the quality of the national income and product accounts, input-output tables, and for productivity and price measurements.

The components of this request are:

Improved measurement of services purchased by industry (16 permanent positions, 10 FTE, and $523,000). This component involves the collection of data on industry purchased services on an annual basis. These data will improve significantly the reliability of the annual and benchmark input-output tables and the derivative estimates of gross national product originating by industry.

Improvement of small company financial data (12 permanent positions, 14 FTE, and $418,000). Comprehensive measures of the financial performance of the small business sector are deteriorating. This component provides for quality improvements in small company financial data by enhancing the sample. It includes broader asset size coverage, greater precision in estimates by industry, and more complete publication of data by asset size.

Expanded corporate financial data (9 permanent positions, 8 FTE, and $450,000). Although quarterly corporate profits data are essential to the calculation of the GNP and the Federal Reserve's flow of funds accounts, such data for the service sector have never been collected by any Federal agency. This initiative is the first step in covering the service sector through a quarterly survey program.

Collect annual detail for more service industries (23 permanent positions, 22 FTE, and $1,050,000). This initiative will provide detailed data items for selected areas of the industry which have changed the services being provided to businesses and consumers, and how the services are being delivered, in order to understand the expenditure patterns and to improve the accuracy of the GNP measures.

Emerging industries (12 permanent positions, 10 FTE, and $400,000). This initiative will identify and publish new data for emerging growth industries in the manufacturing, construction, wholesale, retail and service areas.

Manufacturing statistics (57 permanent positions, 52 FTE, and $2,450,000). Business investment and capital goods data are critical to evaluating productivity growth, competitiveness, capacity utilization, and the projection of the overall economic performance of U.S. industry. This initiative will provide a new annual survey to collect new and anticipated investment data from all business sectors at the national level using a probability sample (43 permanent positions, 38 FTE, and $2,000,000).

In addition, this increase will improve the quantity and quality of responses to the Manufacturers' Shipments, Inventories and Orders (M3) Survey, currently the only source of broad based monthly statistical data on the economic conditions in the U.S. domestic manufacturing sector (24 permanent positions, 24 FTE and $900,000). Specifically, it will reduce the reporting burden per respondent by introducing a probability sample of medium and smaller companies designed to minimize the reporting burden per respondent through rotating samples and other innovative sampling techniques; and will investigate the possibility of collecting other relevant economic data items such as orders for export.

We will eliminate selected Current Industrial Reports (-10 permanent positions, -10 FTE, and -$450,000).

General economic statistics (4 permanent positions, 6 FTE, and $575,000). The Standard Industrial Classification (SIC) system is one of the most important tools developed to promote comparability of establishment statistics describing various facets of the U.S. economy. The 1987 SIC revision was the first major revision in 15 years and brought significant improvements. In FY 1991, the Census Bureau will expand its research in the following areas: (1) research how structural changes in establishment operations impact on the SIC coding; (2) research methods for identifying new technologies and new industries; (3) research the impact of contract services on SIC coding; and (4) research methods of increasing industry comparability with the Harmonized System. The program increase will allow the Census Bureau to provide a proper classification structure for all newly emerging industries, specifically those in the expanding service sector. It will also provide the resources to measure the Harmonized System's impact on the industry classification system (4 permanent positions, 6 FTE, and $375,000).

This request will also fund the Census Bureau's participation in the National Trade Data Bank (NTDB), required by the Omnibus Trade and Competitiveness Act of 1988, Subtitle E, Part I, which calls for the Department of Commerce to establish and operate the NTDB by August 1, 1990. Specifically, this increase will provide funds for development activities which include the design of the data bases, and development of mainframe computer programs for the operation of the NTDB, for loading data into the data bank, for updating data, and for distribution of data to distributors (0 positions, 0 FTE, and $200,000).

Foreign trade statistics (13 permanent positions, 10 FTE, and $500,000). With major trade issues presently at the forefront, this program increase will provide a comprehensive Census program to assess and improve the quality of detailed foreign trade data. Specifically, the Bureau will conduct mail and telephone surveys of exporters to verify and correct statistical data; to verify import data using commercial documents required by the U.S. Customs Service; to conduct audits of export operations and documentation at Customs ports of exit to measure suspected undercount; to increase its educational effort directed toward exporters, importers and brokers; and to study the process of compiling data as a means of measuring errors which result from the processing operations.

Agriculture statistics (-14 permanent positions, -14 FTE, and -$414,000). We will eliminate the Cotton Ginning Report.

Demographic surveys (49 permanent positions, 67 FTE, and $2,826,000). The current processing system which produces the Current Population Survey is outmoded. The program increase will fund the initial phase of redesigning and reprogramming the Current Population Survey (CPS) (15 permanent positions, 10 FTE, and $826,000). The Census Bureau will modernize the CPS processing system by integrating Computer-Assisted Telephone Interviewing (CATI) and Computer-Assisted Personal Interviewing (CAPI), converting clerical coding, employing the latest data base management and data storage technology, providing direct access by users.

The Survey of Income and Program Participation (SIPP) provides comprehensive information on the economic resources of the U.S. population and on how public transfers and tax programs affect their financial circumstances. The survey's original sample design called for introducing a new sample panel of 20,000 households annually to produce survey estimates with only small biases. Because of budget constraints, the Census Bureau has been unable to maintain this sample size. The sample restoration funded by this initiative will begin by introducing a new panel of 14,000 households in February 1991. This restoration process will build on the survey restructuring that was introduced in FY 1990. This restructuring involved the design and implementation of a single, larger 1990 Panel (21,000 interviewed households). Restoration of the full sample for SIPP estimates will produce longitudinal data, such as intrayear transitions into and out of poverty and the characteristics of persons and families who become eligible for government assistance programs or those who no longer are eligible due to changing economic circumstances. The reliability for these longitudinal estimates will improve by 20 percent as a result of the full sample restoration (34 permanent positions, 57 FTE, and $2,000,000).

Demographic reports (1 permanent positions, 1 FTE, and $250,000). During FY 1991, we will examine basic metropolitan statistical areas (MSA) concepts in light of changing work patterns, population distribution, and available technology. We will fund contracts and/or a conference to identify and analyze alternative MSA concepts and develop associated statistical standards (1 permanent position, 1 FTE, and $250,000).

Data systems development (0 permanent positions, 0 FTE, and -$119,000). We will reduce the Data Systems Development subactivity.

Periodic Censuses and Programs. The FY 1991 budget request for the Census Bureau also includes a funding shift for the 1992 Economic Censuses, and a program enhancement for the 2000 Decennial Census.

Economic censuses (7 permanent positions, 7 FTE, and $1,300,000). This funding shift will significantly improve census planning and processing without increasing the total cost of the 1992 Economic Censuses. The Census Bureau proposes to reallocate funding from FY 1994 (25 permanent positions, 25 FTE and $5,000,000) to

FY 1991 (7 permanent positions, 7 FTE, and $1,300,000) and FY 1992 (18 permanent positions, 18 FTE, and $3,700,000) for the 1992 Economic Censuses. This resource shift will devote additional resources to vital planning activities. Changing and emerging data requirements, combined with significant changes in corporate structure and recordkeeping practices demand that we devote more resources to 1992 census planning relative to prior censuses.

2000 Decennial Census (11 permanent positions, 8 FTE, and $747,000). Funds will be used for early planning for the next census, especially to examine the need for innovative changes to meet future challenges and to test the effects of those changes on cost, quality and timeliness. Planning and procurement of automated systems require great lead times. House of Representatives Report 99-669 in particular suggests that research and development begin early on future census automation systems. Test censuses need to be started earlier, particularly if far reaching changes are being considered, with more time between each to allow for sufficient analysis of results. Lastly, early preparations are necessary to gain consensus among the various users and agencies dependent on decennial census information, and to allow time for any necessary legislative review.

Department of Commerce
Bureau of the Census
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990				2,265	$101,288
					2,310	101,288
	Sequester applied, 1990				(35)	(1,398)
					(35)	(1,398)
	Appropriation currently available, 1990	Pos./BA			2,230	99,890
		FTE/Obl.			2,275	99,890
CEN-21	FY 1991 Adjustments to base:					
	Transfers		(4)	0		
	Adjustment for 1990 pay increase and related costs		0	2,512		
	Other cost changes		(25)	2,853		
			(22)			
	Subtotal, adjustments to base:				(29)	5,365
					(26)	
	1991 Base	Pos./BA			2,201	105,255
		FTE/Obl.			2,249	105,255

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personel	Amount
	Current economic statistics											
CEN-29	Business statistics	Pos./BA	321	$13,392	346	$13,739	346	$14,820	437	$18,730	91	$3,910
		FTE/Oblg.	327	13,350	319		319		410		91	
CEN-45	Construction statistics	Pos./BA	170	7,538	184	7,731	184	8,170	184	8,170	0	0
		FTE/Oblg.	184	7,440	180		180		180			
CEN-51	Manufacturing statistics	Pos./BA	233	10,540	252	10,884	240	11,237	297	13,687	57	2,450
		FTE/Oblg.	247	10,537	242		230		282		52	
CEN-67	General economics	Pos./BA	172	8,979	207	10,346	203	11,054	207	11,629	4	575
		FTE/Oblg.	192	8,971	214		213		219		6	
CEN-79	Foreign trade statistics	Pos./BA	383	15,781	413	16,213	413	17,381	426	17,881	13	500
		FTE/Oblg.	384	15,696	375		375		385		10	
CEN-89	Government statistics	Pos./BA	115	4,959	125	5,086	119	5,211	119	5,211	0	0
		FTE/Oblg.	113	4,854	109		103		103		0	
CEN-97	Agriculture statistics	Pos./BA	14	398	14	413	14	414	0	0	(14)	(414)
		FTE/Oblg.	14	408	14		14		0		(14)	
	Subtotal, Current economic statistics	Pos./BA	1,408	61,567	1,541	64,412	1,519	68,287	1,670	75,308	151	7,021
		FTE/Oblg.	1,461	61,256	1,453		1,434		1,579		145	

	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Current demographic statistics											
CEN-103	Demographic surveys	Pos./BA	450	$27,155	486	$27,969	486	$29,453	535	$32,279	49	$2,826
		FTE/Oblg.	677	26,928	666		666		733		67	
CEN-121	Demographic reports	Pos./BA	103	3,111	111	3,183	104	3,030	105	3,280	1	250
		FTE/Oblg.	70	3,091	70		63		64		1	
CEN-129	International statistics	Pos./BA	17	673	18	685	18	733	18	733	0	0
		FTE/Oblg.	13	666	13		13		13			
CEN-131	Housing statistics	Pos./BA	15	558	15	577	15	615	15	615	0	0
		FTE/Oblg.	15	565	15		15		15			
	Subtotal, Current demographic statistics	Pos./BA	585	31,497	630	32,414	623	33,831	673	36,907	50	3,076
		FTE/Oblg.	775	31,250	764		757		825		68	
	Other programs and publications											
CEN-135	Statistical abstracts and supplements	Pos./BA	31	1,595	33	1,683	33	1,796	33	1,796	0	0
		FTE/Oblg.	33	1,630	32		32		32			
CEN-139	General research	Pos./BA	12	690	13	701	13	749	13	749	0	0
		FTE/Oblg.	13	645	13		13		13			
CEN-141	Data systems development	Pos./BA	12	666	13	680	13	592	13	473	0	(119)
		FTE/Oblg.	13	687	13		13		13			
	Subtotal, Other programs and publications	Pos./BA	55	2,951	59	3,064	59	3,137	59	3,018	0	(119)
		FTE/Oblg.	59	2962	58	0	58	0	58	0	0	0
	TOTAL	Pos./BA	2,048	96,035	2,230	99,890	2,201	105,255	2,402	115,233	201	9,978
		FTE/Oblg.	2,295	95,468	2,275		2,249		2,462		213	

Department of Commerce
Bureau of the Census
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Current economic statistics											
Business statistics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Construction statistics	FTE/Obl.	30	$1,276	16	$676	16	$676	16	$676	0	0
Manufacturing statistics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
General economics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Foreign trade statistics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Government statistics	FTE/Obl.	20	845	20	870	20	870	20	870	0	0
Agriculture statistics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Subtotal, Current economic statistics	FTE/Obl.	50	2,121	36	1,546	36	1,546	36	1,546		
Current demographic statistics											
Demographic surveys	FTE/Obl.	440	18,662	426	18,297	426	18,297	426	18,297	0	0
Demographic reports	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
International statistics	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Housing statistics	FTE/Obl.	255	10,835	258	11,053	258	11,053	258	11,053	0	0
Subtotal, Current demographic statistics	FTE/Obl.	695	29,497	684	29,350	684	29,350	684	29,350	0	0
Other programs and publications											
Statistical abstracts and supplements	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
General research	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Data systems development	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Subtotal, Other programs and publications	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Not specified	FTE/Obl.	1,288	54,672	1,330	57,104	1,330	57,104	1,330	57,104	0	0
Total Federal Funds	FTE/Obl.	2,033	86,290	2,050	88,000	2,050	88,000	2,050	88,000	0	0
Non-Federal Sources	FTE/Obl.	150	8,994	150	8,000	150	8,000	150	8,000	0	0
Reimbursable Sequester	FTE/Obl.	0	0	0	(112)	0	0	0	0	0	0
TOTAL		2,183	95,284	2,200	95,888	2,200	96,000	2,200	96,000	0	0

Department of Commerce
Bureau of the Census
Summary of Reimbursable Obligations
(Dollar amounts in thousands)

	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
FEDERAL AGENCIES			
Agency for International Development	$3,759	$4,765	$4,765
Department of Agriculture	284	900	900
Department of Commerce	404	700	700
Department of Defense	1,786	1,800	1,800
Department of Education	2,220	3,000	3,000
Department of Energy	573	700	700
Department of Health and Human Services	12,146	12,000	12,000
Department of Housing and Urban Development	13,562	11,200	11,200
Department of Justice	11,620	13,000	13,000
Department of Labor	33,991	29,685	29,685
Department of Transportation	536	900	900
Department of Treasury	675	1,000	1,000
National Science Foundation	927	750	750
Veterans Administration	312	450	450
Other Federal agencies	2,755	3,150	3,150
Miscellaneous reimbursable services	740	4,000	4,000
Subtotal	86,290	88,000	88,000
NON-FEDERAL (Trust Fund)	8,994	7,888	8,000
TOTAL	95,284	95,888	96,000

Reimbursements Received From: FEDERAL AGENCIES BY PROJECT:	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
Agency for International Development	$3,759	$4,765	$4,765
Department of Agriculture	284	900	900
Farm Input Survey	1	100	100
Size & Characteristics of Farm Population (Age, Sex & Race)	25	100	100
Farmland Ownership Survey	64	350	350
CFFR Enhancement	48	50	50
Other Tabulations & Surveys	146	300	300
Department of Commerce	404	700	700
Textile-Visa	50	60	60
Bus & Health Services	49	50	50
Characteristics of Business Owners Survey	0	150	150
CFFR Enhancement	30	30	30
Maintenance, Patent & Trademark	15	30	30
Security Services - NOAA	142	142	142
Economic Census Tabs	47	75	75
Other Tabulations & Surveys	71	163	163
Department of Defense	1,786	1,800	1,800
Machine Building & Metalworking Studies	122	125	125
Population Industry Data of Foreign Countries (plotted on maps)	652	670	670
Foreign Waterborne Commerce	357	382	382
Third World Data Base, General	2	300	300
Health Services	194	79	79
Other Tabulations & Surveys	459	244	244

Reimbursements Received From:	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
FEDERAL AGENCIES BY PROJECT (CONTINUED):			
Department of Education	2,220	3,000	3,000
Private Schools Survey	168	275	275
National School & Staffing Survey	1,713	1,990	1,990
Other Tabulations & Surveys	339	735	735
Department of Energy	573	700	700
CFFR Enhancement	26	26	26
FT Tapes/Hardcopy	0	19	19
Other Tabulations & Surveys	547	655	655
Department of Health & Human Services	12,146	12,000	12,000
Health Interview Survey - Demographic & Health Data from Sample Households	7,555	6,220	6,220
National Hospital Discharge Survey	634	734	734
National Ambulatory Medical Care Survey	522	690	690
Marriage & Divorce	111	150	150
National Death Index - Statistical Correlations --Socioeconomic Variables	708	455	455
National Maternal & Infant	1,363	2,500	2,500
Teenage Attitudes & Practices Survey	198	710	710
Other Tabulations & Surveys	1,055	541	541
Department of Housing & Urban Development	13,562	11,200	11,200
Annual Housing Survey - National, 1985	2,840	3,410	3,410
Housing Sales Survey	1,276	676	676
Annual Housing Survey -- FYs 1982, 1983 & 1984	6,919	6,663	6,663
Other Tabulations & Surveys	2,527	451	451

Reimbursements Received From:	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
FEDERAL AGENCIES BY PROJECT (CONTINUED):			
Department of Justice	11,620	13,000	13,000
Children in Custody	309	300	300
National Crime Survey	7,799	8,986	8,986
National Prisoner Statistics Program	522	840	840
Criminal Justice Expenditures & Employment	748	1,150	1,150
Parole & Probation	341	375	375
Judicial Statistics	461	525	525
Other Tabulations & Surveys	1,440	824	824
Department of Labor	33,991	29,685	29,685
Consumer Expenditure Survey	9,274	8,484	8,484
Point of Purchase Survey	1,383	1,347	1,347
National Longitudinal Survey - Measuring Work Experience of Age & Sex by Group	1,082	778	778
Labor Force Data	18,662	18,297	18,297
Job Training Longitudinal Survey	848	722	722
Other Tabulations & Surveys	2,742	57	57
Department of Transportation	536	900	900
Liner Operations Name & Nationality	127	127	127
1990 Census - Transportation Planning Package	2	175	175
CFFR Enhancement	18	48	48
Vessel Data Tapes	35	35	35
Other Tabulations & Surveys	354	515	515
Department of Treasury	675	1,000	1,000
IRS Research	644	585	585
Other tabulations & surveys	31	415	415

Reimbursements Received From:	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
FEDERAL AGENCIES BY PROJECT (CONTINUED):			
National Science Foundation	927	750	750
Survey of Scientists & Engineers	573	500	500
Research & Development	253	200	200
Other Tabulations & Surveys	101	50	50
Veterans Administration	312	450	450
Survey of Veterans III	136	150	150
Veterans Data	175	175	175
Other Tabulations & Surveys	1	125	125
Other Federal agencies	2,755	3,150	3,150
Miscellaneous reimbursable services	740	4,000	4,000
FEDERAL REIMBURSABLES	86,290	88,000	88,000
NON-FEDERAL (TRUST FUND):			
State & Local Governments -- Special Censuses	399	105	105
Private Sector Organizations & Industries	4,536	3,091	3,178
Tapes, Miscellaneous Data Products & Fixed Fee Services	1,092	1,198	1,210
Special Compilations	2,759	1,200	1,275
Age & Citizenship Research	685	693	693

Reimbursements Received From:	FY 1989 Actual	FY 1990 Currently Available	FY 1991 Estimate
NON-FEDERAL (CONTINUED):			
Foreign Governments:			
Foreign Consultations -- Statistics & Data Processing	2,893	3,895	3,920
Saudi Arabia	2,537	3,460	3,500
Nigeria	246	340	345
Other	110	95	75
Foreign Training	1,166	797	797
NON-FEDERAL (Trust Funds)	8,994	7,888	8,000
TOTAL	95,284	95,888	96,000

Department of Commerce
Bureau of the Census
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 President's Budget	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$190,752	$195,778	$201,255	$211,233	$9,978
Financing:					
Offsetting collections from:					
Federal funds	(86,290)	(88,000)	(88,000)	(88,000)	0
Trust funds	0	0	0	0	0
Non-Federal sources	(8,994)	(8,000)	(8,000)	(8,000)	0
Recoveries					
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance lapsing	567	0	0	0	0
Reimbursable sequester	0	112	0	0	0
Budget Authority	96,035	99,890	105,255	115,233	9,978
Transferred to /from other accounts					
Sequester	0	1,398	0	0	0
Appropriation	96,035	101,288	105,255	115,233	9,978

Department of Commerce
Bureau of the Census
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Transfer to "Another Appropriation"	(4)	0
Delete unfunded positions	(25)	0
Adjustments for FY 1990 pay increase and related costs in 1991:		
Amount in FY 1991 to provide full-year cost of pay increase		$2,512
Less amount absorbed		0
Total, adjustment for 1990 pay increase	0	2,512
Adjustments for FY 1991 pay increase and related costs in 1991:		
Amount in FY 1991 to provide cost of pay increase		2,192
Less amount absorbed		(1,096)
Total adjustment for 1991 pay increase	0	1,096
ESTIMATED COST CHANGES:		
Full year cost in 1991 of positions financed for part year in 1990	0	124
Additional compensable day		258
Civil service retirement contributions		(176)
Federal Employees' Retirement System:		
FERS basic benefit contributions		332
Thrift Savings Plan		50
Federal Insurance Contributions Act (FICA):		
OASDI		171
Medicare		9
Health insurance premiums		557
Employees' compensation fund		148
Rental payments to GSA		324
Federal telecommunications system 2000		(674)
Printing and reproduction		186
Other services		324
Payments to GA, WCF		54
Supplies and materials		70
Subtotal, other increases	0	1,757
Total	(29)	5,365

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATIONS OF ADJUSTMENTS TO BASE
(Direct obligations in thousands)

	Perm Pos.	Amount
Transfer	(4)	0
This transfer to Economic and Statistical Analysis, Reimbursable, of four positions is in support of the National Trade Data Bank which is required by the Omnibus Trade and Competitiveness Act of 1988 (Subtitle E, Part I).		
Delete unfunded positions	(23)	0
Realignment of FTE and positions to agree with funding availability.		
Adjustment for 1990 pay increase and related costs:		
Total cost in 1990 of pay increase	0	$1,872
Less amount absorbed	0	(1,872)
Anticipated 1990 pay increase supplemental	0	0
Amount in 1991 to provide full-year cost of pay increase	0	2,512
Less amount absorbed	0	0
Subtotal, adjustment for 1990 pay increase	0	2,512

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, Census is absorbing the full cost of this pay increase.

	Perm Pos.	Amount
Adjustment for 1991 pay increases and related costs:		
Total cost in 1991 of general pay increase	0	2,038
Less amount absorbed	0	(1,019)
Subtotal, adjustment for 1991 general pay increase	0	1,019
Total cost in 1991 of SES pay increase	0	154
Less amount absorbed	0	(77)
Subtotal, adjustment for 1991 SES increase	0	77
Total adjustment for 1991 pay increases	0	1,096

	Perm Pos.	Amount
Full year cost in 1991 of positions financed for part year in 1990	0	$124

An increase of $124,182 is required for full year cost in 1991 of positions financed for part year in 1990. The computation is as follows:

	FTE	Amount
Annual salary of new positions in 1990 request to Congress	21	$403,448
Less 5 percent lapse	0	-20,172
Full year cost of personnel compensation	21	383,276
Personnel benefits at 27 percent	0	103,485
Full-year cost of personnel compensation benefits	21	486,761
Personnel compensation and benefits included in 1990 request	-18	362,579
1991 Adjustment to base	3	124,182

	Perm Pos.	Amount
Additional compensable days	0	258

FY 1991 has 261 compensable days compared to 260 in FY 1990. The cost of this extra day was calculated by dividing the FY 1990 salaries and related benefits by 260.

	Perm Pos.	Amount
Civil Service Retirement System (CSRS)	0	(176)

The number of employees covered by CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by retirement systems will drop from 66.8 percent for CSRS in 1990 to 62.4 percent in 1991. This will result in a decrease of 4.4 percent in the cost of CSRS contributions, for a decrease of $175,757. ($57,064,000 x .07 x .044)

	Perm Pos.	Amount
Federal Employees' Retirement System (FERS)	0	332

The number of employees covered by the FERS will continue to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 33.2 percent in 1990 to 37.6 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.0 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($57,064,000)	
Basic benefit cost in 1990 ($57,064,000 x .332 x .1297)	$2,457,199
Basic benefit cost in 1991 ($57,064,000 x .376 x .1300)	2,789,288
Increase in basic benefit contributions (1991 minus 1990)	332,089

	Perm Pos.	Amount
Thrift Plan	0	$50

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of employees covered by FERS will increase from 33.2 percent in 1990 to 37.6 percent in 1991. We estimate the agency contribution will be 2 percent. The increased cost for contributions to the Thrift Savings Plan are:

Payroll subject to retirement systems ($57,064,000)	
Basic benefit cost in 1990 ($57,064,000 x .332 x .02)	$378,905
Basic benefit cost in 1991 ($57,064,000 x .376 x .02)	429,121
Increase in basic benefit contributions (1991 minus 1990)	50,216

	Perm Pos.	Amount
Federal Insurance Contributions Act (FICA)	0	171

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $32,725 in 1991 from $30,025 in 1990, and the OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in 1991. This will result in an increase of $171,150 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 ($57,064,000 x .3320 x .9551)	$18,094,606	
FERS OASDI tax in 1990 ($18,094,606 x .0617)		1,116,437
FERS payroll subjecty to FICA tax in 1991 ($57,064,000 x .3760 x .9661)	20,728,703	
FERS OASDI tax in 1991 ($20,728,703 x .0620)		1,285,180
Increase (1991 minus 1990)		168,743
Other payroll not covered by retirement systems ($2,485,000)		
Other payroll subject toFICA tax in 1990 ($2,485,000 x .9551)	2,373,424	
OASDI tax in 1990 ($2,373,424 x .0617)		146,440
Other payroll subject to FICA tax in 1991 ($2,485,000 x .9661)	2,400,759	
OASDI tax in 1990 ($2,400,759 X .0620)		148,847
Increase (1991 minus 1990)		2,407
Total OASDI increase		171,150

	Perm Pos.	Amount
Medicare	0	$ 9

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 95.51 percent in 1990 to 96.61 percent in 1991. The cost of medicare will increase as follows:

Total payroll ($59,389,000)	
Total payroll subject to FICA in 1990 ($59,389,000 x .9551)..	$56,722,434
Total payroll subject to FICA in 1991 ($59,389,000 x .9661)..	57,375,713
Increase in payroll subject to FICA (1991 minus 1990)........	653,279
Increase in Medicare tax ($653,279 x .0145).............	9,473

	Perm Pos.	Amount
Health Insurance	0	557

Office of Personnel Management has estimated that the Government's contribution to the Federal Employees' Health Insurance premium plans has increased by an average of 28 percent. Applied against a base of $1,990,000 the increase equals $557,200.

	Perm Pos.	Amount
Employees' Compensation Fund	0	148

The increase in the repayment to the Employees' Compensation Fund is the result of higher costs in the year ending June 30, 1989 than in the year ending June 30, 1988. The FY 1989 charges of $566,497 will be reimbursed to the Department of Labor Employees' Compensation Fund in FY 1991 pursuant to 5 USC 8147. The 1988 bill was $418,199.

	Perm Pos.	Amount
Rent Payments to GSA	0	324

GSA rates are projected to be approximately 4.4 percent higher in FY 1991 compared to FY 1990. Applied against a base of $7,371,000 the increase equals $324,324.

	Perm Pos.	Amount
FTS-2000		(674)

Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

	Perm Pos.	Amount
Printing and reproduction The cost of printing, both paper and labor, continues to increase. The increase was calculated by applying the U.S. Government Printing Office (GPO) estimated 7 percent increase for 1991 over 1990 to the FY 1990 estimate of $2,653,000.	0	$186
Working capital fund The increase for the Working Capital Fund is the Bureau of the Census' share of increased costs for this service.	0	54
Other services The increase will be used to offset inflationary increases for non-government contracts and other services.	0	324
Supplies and materials The increase in the cost of supplies is based on the GNP deflator of 4.2 percent applied to the FY 1990 estimate of $1,676,000.	0	70
Total	(29)	$3,365

Department of Commerce
Bureau of the Census

Salaries and Expenses
Appropriation Language and Code Citations:

1. For expenses necessary for collecting, compiling, analyzing, preparing, and publishing statistics, provided for by law, $115,233,000.

    13 U.S.C. 4, 6, 8(b), 12, 41-45, 61-63, 181, 182, 301-307; 15 U.S.C. 1516; 19 U.S.C. 1484, 2354, 2393; 44 U.S.C. 1343.

    13 U.S.C. 4 authorizes the Secretary to "perform the functions and duties imposed upon him by this title," or he may delegate any of them "to such officers and employees of the Department of Commerce as he may designate."

    13 U.S.C. 6, 8(b), 12, 41-45, 61-63, 182, 301-307 provide for (1) acquisition of information from other organizations, public and private; (2) conducting joint statistical projects with nonprofit organizations or agencies; (3) conducting mechanical and electronic developmental work as needed; (4) collection and publication of statistics on cotton ginning; (5) collection and publication of statistics on fats and oils; (6) conducting current surveys on statistical subjects covered by periodic censuses; and (7) compilation and publication of information on imports, exports, and mode of transportation.

    13 U.S.C. 181 provides that "The Secretary...shall annually produce and publish for each state, county, and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and... shall biennially produce and publish for other local units of general purpose government current data on total population."

    15 U.S.C. 1516 provides that "The Secretary of Commerce shall have control of the work of gathering and distributing statistical information naturally relating to the subjects confided to his department...He shall also have authority to call upon other departments of the government for statistical data and results obtained by them; and he may collate, arrange, and publish such statistical information so obtained in such manner as to him may seem wise."

    19 U.S.C. 1484(e) provides that "The Secretary of the Treasury, the Secretary of Commerce, and the United States International Trade Commission are authorized and directed to establish... an

enumeration of articles...comprehending all merchandise imported into the United States and exported from the United States, and shall seek, in conjunction with statistical programs for domestic production and programs for achieving international harmonization of trade statistics, to establish the comparability thereof with such enumeration of articles.'

19 U.S.C. 2354 provides that 'Whenever the (International Trade) Commission begins an investigation...with respect to an industry, the Commission shall immediately notify the Secretary (of Commerce) of such investigation, and the Secretary shall immediately begin a study of:

(1) the number of firms in the domestic industry producing the like or directly competitive article which have been or are likely to be certified as eligible for adjustment assistance, and

(2) the extent to which the orderly adjustment of such firms to the import competition may be facilitated through the use of existing programs.'

19 U.S.C. 2393 provides that 'The Secretary of Commerce and the Secretary of Labor shall establish and maintain a program to monitor imports of articles into the United States which will reflect changes in the volume of such imports, the relation of such imports to changes in domestic production, changes in employment within domestic industries producing articles like or directly competitive with such imports, and the extent to which such changes in production and employment are concentrated in specific geographic regions of the United State.'

44 U.S.C. 1343 provides that 'In addition to the usual number of the Statistical Abstract of the United States, twelve thousand copies shall be printed: three thousand for the Senate, six thousand for the House of Representatives, and three thousand for distribution by the Secretary of Commerce.'

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Business statistics											
Current retail trade reports	Pos./BA	208	$8,232	229	$8,461	229	$8,990	248	$10,059	19	$1,069
	FTE/Obl.	214	8,278	205		205		232		27	
Current wholesale trade reports	Pos./BA	34	1,359	35	1,420	35	1,511	35	1,511	0	0
	FTE/Obl.	34	1,316	34		34		34		0	
Current service trade reports	Pos./BA	61	2,740	62	2,755	62	3,149	134	5,990	72	2,841
	FTE/Obl.	60	2,729	61		61		125		64	
Statistical sample improvement	Pos./BA	18	1,061	20	1,103	20	1,170	20	1,170	0	0
	FTE/Obl.	19	1,027	19		19		19		0	
Total	Pos./BA	321	13,392	346	13,739	346	14,820	437	18,730	91	3,910
	FTE/Obl.	327	13,350	319		319		410		91	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Business statistics

Goals and Objectives

Goals:

The goal of Business Statistics is to provide current information on the U.S. distributive and service trade activity in total as well as for selected kinds of businesses and geographic areas.

Objectives:

The objectives of Business Statistics are to maintain and improve the quality and timeliness of the information collected; to expand the database on services; to ensure the continued focus of the program on statistics relevant to national needs; to provide local data for community planning; and to provide businesses with data for determining and enhancing the effectiveness of their operations.

Base Program

Current retail trade reports. This program provides monthly and annual estimates of retail sales, end-of-month inventories, and inventory/sales ratios. The monthly estimates consist of retail sales and inventories by detailed kinds of U.S. businesses, sales by major kind-of-business groups for the 4 regions and 9 geographic divisions of the United States, and sales by limited kind-of-business categories for the 25 largest metropolitan areas, 15 primary metropolitan statistical areas (PMSA), 5 cities, and 28 large states.

The Census Bureau provides advance sales estimates for the United States as a whole, based on early reports from a small subsample of the larger monthly retail survey panel, for the 12 major kind-of-business categories. This advance monthly retail publication is designated as one of the principal economic indicators. The media, including television newscasts and the financial pages of newspapers and magazines, regularly highlight the sales levels and trends from this report.

The annual portion of the Current Retail Trade program provides key measures of retail activity for intercensal years and is the basis for benchmarking monthly estimates of sales and inventories. The Annual Survey includes data by kinds of business at the national level on annual sales and year-end inventories, methods of inventory valuation, sales by legal form of ownership, accounts receivable balances, and costs of purchased merchandise.

Program output	Sample size	Universe
Monthly retail trade reports.................	12,500 firms	2.0 million firms
Advance monthly retail trade reports.........	3,200 firms (subsample)	2.0 million firms
Annual retail trade report...................	22,000 firms	2.0 million firms

Data user	Use
Bureau of Economic Analysis..................	Compute national accounts.
Council of Economic Advisers, Department of Treasury and other agencies.................	Monetary and fiscal policies.
State and local governments and private businesses.................................	Measure consumer activity.
Local areas.................................	Assess adverse conditions such as weather, strikes and resource shortages and plan recovery from these conditions.
Large and small retail firms.................	Determine market shares, develop forecast models, and past and potential changes in buying habits.

Current wholesale trade reports. This program provides monthly estimates of merchant wholesale trade sales, end-of month inventories, and stock/sales ratios, along with annual estimates of sales, inventories, methods of inventory valuation, purchases, sales/inventory ratios, and gross margins for merchant wholesalers by kind-of-business groups at the national level. The annual data provide the basis for benchmark estimates of sales and inventories, including the collection and publication of purchases and inventory valuation data.

Program output	Sample size	Universe
Monthly sales and end-of-month inventories...	3,500 firms	335,000 merchants; wholesale establishments
Annual sales, purchases, inventories and gross margins..............................	4,800 firms	Same

Data user	Use
Bureau of Economic Analysis, Federal Reserve Board, Bureau of Labor Statistics, Council of Economic Advisers...........................	Leading economic indicator to evaluate current economic conditions, and to develop fiscal and monetary policies.
Bureau of Economic Analysis..................	Compute national accounts, update industrial input-output tables between censuses, benchmark revisions to monthly series and revise GNP estimates.
Private businesses...........................	Develop forecast models and measure changes in buying patterns.

Current service trade reports. This program provides annual information on selected services in the United States. The Service Annual Survey (SAS) includes estimates of receipts for major service groups (hotels and motels; pesonal services; business, automotive, and miscellaneous repair services; social services; and health, legal and other professional services). Since FY 1985, there has been an incremental but consistent expansion to SAS. The Census Bureau added new industries that were covered only in the 5-year census and provided data for industries previously published at more aggregate levels. In FY 1988 detailed expense and/or revenue items were added for selected key industries including personnel supply services, arrangers of passenger transportation, and nursing and personal care facilities.

The Census Bureau initiated the Motor Freight Transportation and Warehousing Survey (WATS) in FY 1986. The survey produces detailed estimates of revenues and expenses for the trucking and warehousing industries, as well as inventories of revenue-generating freight equipment for the trucking industry. In FY 1987, the Census Bureau more than doubled the number of data items in the survey.

In FY 1990, the Census Bureau initiated the Annual Survey of Communication Services. This survey provides detailed estimates of revenues and expenses for the telephone industry, radio and television broadcasting, cable television, and other communication services.

Program output	Sample size	Universe
Service Annual Survey...........	20,500 firms	3 million personal and business service establishments.
Motor Freight Transportation and Warehousing Survey (WATS)...	1,500 firms	89,000 trucking and warehousing establishments.
Annual Survey of Communication Services........................	1,000 firms	30,000 telephone, radio and television broadcasing, cable TV, and other communication establishments.

Data user	Use
Bureau of Economic Analysis...........	Measure consumer activity and compute GNP accounts.
Bureau of Labor Statistics............	Develop price indexes and productivity measurements.
Department of Transportation..........	Policy development and program management and evaluation.
Private businesses....................	Project industry growth, measure performance against aggregate, and plan for changing patterns in consumer activity.
Trade and professional association..........................	Better understanding of volatile industry trends.

Statistical sample improvement. This program provides research, development and implementation of sample improvements for surveys conducted under the Business Statistics subactivity. This process includes redrawing samples, reviewing economic series and data relevant to trends in distributive and service industries, and making other quality improvements. These activities maintain or improve the quality of current survey estimates, and provide the basis for research on more efficient methods of survey processing with a view toward reducing respondent burden and survey costs.

The Census Bureau schedules sample maintenance, subsequent updates and quality improvements on a quarterly and annual basis. These updates improve coverage of the business universe and ensure accurate representation of those firms selected in the samples. These activities maintain current business survey information on the same classification basis and coverage as the most recent economic censuses, and they protect valuable economic time series from extensive and costly revision.

The Census Bureau also reselects samples periodically to redistribute respondent burden and minimize the sampling error. Specifically, in FY 1991 the Bureau will select new list samples based on the results from the 1987 economic censuses and updates from the 1988 and 1989 Company Organization Surveys. The updated measures of firm size and industrial classification will yield more accurate estimates. Other FY 1991 activities include the continuation of the automation plans for the collection, analysis, and processing of current business statistics leading to a more timely release of statistical information, enhanced accuracy of the data, and increased efficiency in survey operations. Part of this modernization program includes computer-assisted data collection for telephone follow-up for current business surveys.

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Business statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Current retail trade reports...	Pos./BA	229	$8,990	248	$10,059	19	$1,069
	FTE	205		232		27	

Improvements to advance retail sales estimates (19 permanent positions, 27 FTE, and $1,069,000). The Advance Monthly Retail Sales Survey (MARTS) provides advance retail sales estimates for the United States, including broad kinds-of-business classification. These advance sales estimates are based on early reporting by a small subsample of the larger monthly retail survey panel. The information provided by this survey is deemed as a principal economic indicator. The primary users of these estimates include the Bureau of Economic Analysis, Council of Economic Advisers, and Federal Reserve Board. Responding directly to the Department's long-range goal to improve official economic and trade data analysis, the Census Bureau is requesting a program increase to improve the advance retail sales estimates data.

This program increase is designed to improve the overall quality of the MARTS. Desired improvements will be accrued by reducing non-sampling problems such as distortions caused by survey non-responses, very early collection and processing requirements, non-standard (4 and 5 week periods vs. calendar month) reporting patterns of survey respondents, and reducing or eliminating various other sources of non-sampling error.

Specifically, research to improve statistical methods will significantly reduce non-sampling error stemming from non-response, very early collection, non-standard reporting by survey respondents, the adjustments applied to that data prior to tabulation of tne estimates, and various other sources of bias. Approximately 40 percent of the advance sales estimates are developed from respondents who report on a non-calendar month basis. These data are adjusted to conform to a calendar month. Research into this adjustment methodology will lead to improved techniques designed to reduce biases associated with this process. In addition, research efforts will also assess the effect of non-response on the estimates. The biases incurred due to non-response are not well understood. Research efforts will determine the reasons why certain retail businesses do not respond to the advance survey. Knowledge gained from this research will produce methods to increase response as well as to reduce the residual biases associated with the remaining non-response. Approximately 65 percent of the sales estimate is based on respondent data; the remaining 35 percent is imputed or estimated from similar information provided by other responding businesses. As an important ancillary benefit, this research will have relevance to the larger Monthly Retail Trade Survey.

Other concurrent research activities addressing the non-sampling problems will be directed toward exploring electronic reporting alternatives to accelerate response and reduce reporting burden, reducing biases associated with telephone follow-up interviews, improving data editing, and performing content evaluation studies. These research activities will commence in FY 1991 with improved methodology supported by this research.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Business Statistics
Program Change: Improvements to Advance Retail Sales Estimates

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$344
11.3	Other than full-time permanent	305
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	649
12.1	Civilian personnel Benefits	130
13	Benefits for former personnel	0
21	Travel and transportation of persons	37
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	101
23.3	Communications, utilities and miscellaneous charges	20
24	Printing and reproduction	21
25	Other services	3
26	Supplies and materials	0
31	Equipment	108
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	1,069

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: Business Statistics
Program Change: Improvements to Advance Retail Sales Estimates

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		12	2	$37,079	$74,158
Mathematical statistician		12	1	37,079	37,079
Programmer		12	1	37,079	37,079
Program analyst		11	2	30,937	61,874
Statistician		9	1	25,570	25,570
Mathematical statistician		9	1	29,208	29,208
Program analyst		9	3	25,570	76,710
Statistician		7	2	20,902	41,804
Mathematical statistician		7	1	23,874	23,874
Programmer		7	2	20,902	41,804
Program analyst		7	1	20,902	20,902
Computer operator		7	2	20,902	41,804
Total			19		511,866
Less lapse	32.81%		(5)		(167,943)
Total full-time permanent			14		343,923

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	14
Other than full-time permanent	13
Total	27
Authorized Positions:	
Full-time permanent	19
Other than full-time permanent	40
Total	59

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Business statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Current service trade reports..	Pos./BA	62	$3,149	134	$5,990	72	$2,841
	FTE	61		125		64	

Improved and expanded service statistics (72 permanent positions, 64 FTE, and $2,841,000). Service industry data are critical to measure accurately overall economic activity; one of the Department of Commerce's goals is "improving statistics of the services-producing sector of the world economy." This request provides needed improvements to Gross National Product (GNP) source data on services. While recent statistical-gathering efforts have brought about needed improvements, economic indicators used by the Federal Government to shape economic policy still do not adequately reflect the dominant role of services. This initiative continues the expansion of the Census Bureau's current services program. In the mid 1970's, the Advisory Committee on GNP Data Improvements, chaired by Daniel Creamer, recommended several improvements in the source data used to prepare the GNP accounts. Nearly 15 years later, several of the recommendations for improvements still are not implemented. Deregulation and the increased reliance, primarily in the private sector, on the GNP has resulted in a reexamination of the existence of data deficiencies which, perhaps, are more important now than they were then. This initiative is essential for improving the quality of the national income and product accounts, input-output tables, and for productivity and price measurements.

The components of this request are:

- Improved Measurement of Services Purchased by Industry (16 permanent positions, 10 FTE, and $523,000). Only limited data on services (personal, business, and professional services, insurance, or maintenance construction) purchased by industry are collected every 5 years on the economic censuses. No information is available on an annual basis. In the absence of such information, the input-output (I-O) analyst must allocate the costs of purchased services among industry subsectors, as well as between intermediate and final consumption. To compound the estimating problem, there are no satisfactory estimates of the total costs of many individual services. We estimate that our census data on value added in manufacturing is overstated by 30 percent or more as a result on not collecting information on the costs of purchased services.

This component involves the collection of data on industry purchased services. These data will improve significantly the reliability of the annual and benchmark I-O tables and the derivative estimates of gross product originating by industry.

This request will provide for the annual collection of data. We will begin discussions with companies on the reporting of these data at either the establishment, divisional, or company level as part of our 1989 Recordkeeping Practices Survey. Preliminary results from this survey are expected in the summer of 1990. In FY 1991 we will extend our discussions with companies and with the Bureau of Economic Analysis as well as with other primary users of the data. Also, we will develop the survey vehicle and pretest the questions. In 1992 we will begin the collection of data.

o Improvement of Small Company Financial Data (12 permanent positions, 14 FTE, and $418,000). The importance of the small business community to the vitality of the U.S. economy is well established, yet comprehensive measures of its financial performance are deteriorating. The official corporate profits data for wholesale and retail trade no longer reflect the current activity of small companies. These two sectors are heavily populated by small firms whose gross under representation in the sample significantly affect the accuracy of gross national product estimates. This component provides for quality improvements in small company financial data by enhancing the sample. It includes broader asset size coverage, greater precision in estimates by industry, and more complete publication of data by asset size. These improvements were developed at the request of Congress in fiscal years 1985 and 1986, but have not been implemented to date.

The Census Bureau will begin quarterly collection of financial data from 5,000 to 6,000 small mining, wholesale, and retail corporations in calendar year 1992. We will publish these data quarterly.

o Expanded corporate financial data (9 permanent positions, 8 FTE, and $430,000). Although quarterly corporate profits data are essential to the calculation of the Gross National Product (GNP) and the Federal Reserve's flow of funds accounts, such data for the service sector have never been collected by any Federal agency. This initiative is the first step in covering the service sector through a quarterly survey program. During FY 1991 and FY 1992, the Census Bureau will design and select a sample of business service corporations. These corporations will represent one-third of the service sector profits and have the available financial data needed for the survey. In the middle stages of this development process, the Census Bureau will design and test a questionnaire as part of the

Quarterly Financial Report (QFR) program. This will be similar to that used in the Census Bureau data collection from manufacturing, mining and trade corporations. The collections of quarterly data will begin in 1993; the data will be integrated in the QFR publication and press release.

- Collect annual detail for more service industries (23 permanent positions, 22 FTE, and $1,050,000). Selected areas of the industry have changed the services being provided to businesses and consumers, and how the services are being delivered. The single measure of total dollar revenue hides the true understanding of economic change in these areas. Also, growth in personal expenditures on health and recreational activities have been inadequately measured. Accordingly, detailed data items are needed to understand the expenditure patterns and to improve the accuracy of the GNP measures. This program increase will provide income and expenditure data for industries in business services (including computer and data processing; management, consulting, and public relations services; and equipment rental and leasing), automotive rental and leasing, amusement and recreational services and offices of health practitioners.

- Emerging industries (12 permanent positions, 10 FTE, and $400,000). The Census Bureau will initiate a new program in FY 1991 to identify and publish new data for emerging growth industries in the manufacturing, construction, wholesale, retail and service areas. The industries being considered for data expansion include: in the manufacturing area, automated material handling equipment, industrial robotics, and fiber optic cables; in wholesale, communication equipment and supplies, and prefabricated building and structural assemblies; for retail, warehouse buying clubs and home video shopping; and for services, complete courier services; telemarketing; drug and alcohol rehabilitation and day care for the elderly or mentally retarded. In addition the Bureau will evaluate other industries that show growth potential for possible inclusion in the surveys. For example, specialty automobile repair services (i.e., lubricating and tune-up services), self-storage warehousing, and catalog/directory publishing.

- Most government and many private data gatherers collect and publish information based on the Standard Industrial Classification (SIC). The SIC is reviewed and revised periodically to reflect the changing structure of the U.S. economy. A significant number of the U.S. growth industries are not assigned a unique industry classification. They are often grouped with other industries in large "catch all" categories which totally mask their true functions and influences on the U.S. economy.

- This initiative will provide a series of one-time surveys of one-time surveys to identify firms from the broad four-digit SIC level encompassing such emerging industries. These firms will be identified from the Census Bureau's Standard Statistical Establishment List (SSEL) which will be updated to reflect the results of the 1987 Economic Census.

  Questionnaires will be mailed to these firms requesting detailed kind-of-business information and basic financial and/or product data.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Business statistics
Program Change: Improved and expanded service statistics

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$1,325
11.3	Other than full-time permanent	196
11.5	Other personnel compensation	17
11.8	Special personnel services payments	0
11.9	Total personnel compensation	1,538
12.1	Civilian personnel Benefits	391
13	Benefits for former personnel	0
21	Travel and transportation of persons	110
22	Transportation of things	1
23.1	Rental payments to GSA	0
23.2	Rental payments to others	226
23.3	Communications, utilities and miscellaneous charges	134
24	Printing and reproduction	147
25	Other services	170
26	Supplies and materials	40
31	Equipment	84
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	2,841

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: Business statistics
Program Change: Improved and expanded service statistics

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		13	4	$44,092	$176,368
Programmer		13	1	44,092	44,092
Statistician		12	3	37,079	111,237
Programmer		12	5	37,079	185,395
Accountant		11	1	30,937	30,937
Statistician		11	7	30,937	216,559
Programmer		11	5	30,937	154,685
Program analyst		11	1	30,937	30,937
Programmer		9	6	25,570	153,420
Computer operator		9	3	25,570	76,710
Program analyst		9	3	25,570	76,710
Statistician		9	4	25,570	102,280
Accountant		9	1	28,121	28,121
Statistical assistant		9	1	25,570	25,570
Statistician		7	7	20,902	146,314
Programmer		7	5	20,902	104,510
Program analyst		7	2	20,902	41,804
Corporate analyst		7	2	20,902	41,804
Computer operator		7	3	20,902	62,706
Statistician		5	3	16,876	50,628
Accounting technician		5	1	16,876	16,876
Financial reports assistant		4	2	15,083	30,166
Clerk-typist		3	2	16,125	32,250
Total			72		1,940,079
Less lapse	31.71%		(19)		(615,199)
Total full-time permanent			53		1,324,880

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	53
Other than full-time permanent	11
Total	64
Authorized Positions:	
Full-time permanent	72
Other than full-time permanent	11
Total	83

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Construction statistics											
Construction permits data	Pos./BA	45	$1,958	47	$2,032	47	$2,164	47	$2,164	0	0
	FTE/Obl.	47	1,910	46		46		46		0	
Construction starts data	Pos./BA	54	2,404	61	2,403	61	2,546	61	2,546	0	0
	FTE/Obl.	65	2,248	64		64		64		0	
Construction value data	Pos./BA	71	3,176	76	3,296	76	3,460	76	3,460	0	0
	FTE/Obl.	72	3,282	70		70		70		0	
Total	Pos./BA	170	7,538	184	7,731	184	8,170	184	8,170	0	0
	FTE/Obl.	184	7,440	180		180		180		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	FTE	Amount
Construction statistics											
Construction permits data	FTE/Obl.	30	$1,276	16	$676	16	$676	16	$676	0	0
Construction starts data	FTE/Obl.										
Construction value data	FTE/Obl.										
Reimbursable obligations	FTE/Obl.	30	$1,276	16	$676	16	$676	16	$676	0	0

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Construction statistics

Goals and Objectives

Goals:

The goal of Construction Statistics is to provide current data on the economic and social aspects of the U.S. construction activities such as authorized construction, housing starts, characteristics and prices of new housing, and value of new construction put in place.

Objectives:

The objectives of Construction Statistics are to maintain and improve the accuracy, reliability and timeliness of data to ensure that the data are pertinent to national economic and social needs; to maintain efforts to collect and provide information required for legislative and planning purposes at the national and local government levels; and to transmit timely information directly to state agencies.

Base Program

Construction permits data. This program provides monthly and annual statistics on the number and valuation of privately-owned housing units and nonresidential buildings that are authorized by building permits. Data collected monthly from a sample of 8,300 permit-issuing places are used to produce national, regional, and state estimates, as well as totals for selected metropolitan statistical areas and individual places. Annually, we collect data and make it available for permit-issuing places that are not in the monthly sample. The national estimate of housing units authorized by building permits is a component of the Index of Leading Economic Indicators. We also use data from this program to design samples for the Census Bureau's Survey of Construction and the Current Population Survey.

Program output	Sample size	Universe
Monthly permits data..........................	8,300 permit-issuing offices	17,000 permit-issuing offices
Annual permits data..........................	8,700 permit-issuing offices not in monthly sample	17,000 Permit-issuing offices

Data user	Use
Federal Reserve Board; Federal Home Loan Bank Board; and Department of Housing and Urban Development, and Bureau of Economic Analysis	Analyze national and regional economic and evaluation programs.
Financial institutions......................	Estimate mortgage demand.
Private businesses..........................	Market planning, material use and investment analysis.
State and local agencies....................	Local area planning and economic development.

Construction starts data. This program provides monthly statistics on the number of housing units started and the number of housing units authorized (but not yet started) for the United States and the four Census regions (Northeast, Midwest, South and West), as well as national data on ownership and number of units in structure. In conjunction with the Department of Housing and Urban Development, this program also collects information on the completion and sale of new housing units. Information on housing starts is a principal economic indicator. This program also develops and publishes quarterly and annual price indexes on residential construction based on financial and physical characteristics data collected in the sample survey.

Program output	Sample size	Universe
Monthly construction starts.................	41,500 buildings	980,000 - 1,100,000 buildings.

Data user	Use
Department of Housing and Urban Development and Congress...............................	Develop and evaluate housing programs.
Council of Economic Advisers, Federal Reserve Board, Office of Management and Budget and Bureau of Economic Analysis.....	Determine condition of economy and develop national income and product accounts.
Bureau of Economic Analysis.................	Constant dollar series for GNP.
Manufacturers..............................	Plan production schedules and establish market shares.
Other Federal agencies......................	Measure new housing cost changes.
Insurance companies and financial institutions..............................	Adjust rates and establish replacement costs. Estimate mortgage demand.

Construction value data. This program provides monthly, national estimates of the dollar value of new construction put in place by type of construction. The categories include residential and non-residential buildings as well as non-building construction such as highways and sewer projects. Monthly surveys provide data for state and local and most privately owned construction. The Census Bureau develops estimates on construction outlays for the remaining types of construction (except Federal) by using indirect measurements, analytical techniques and secondary data sources; and obtains Federal construction expenditures directly from the agencies.

This Construction Value Data program also provides quarterly data on expenditures by owners of residential property for upkeep and improvement. Data on improvements (additions, alterations and major replacement) provide an estimate on the total value of new construction put in place. It releases limited geographic and type-of-expenditure data on an annual basis. The annual estimates include information on the type of work, characteristics of the property such as value and age of the structure, and selected characteristics of the property owners.

Program output	Sample size	Universe
Monthly value data...........................	14,500 construction projects	150,000-200,000 projects
Quarterly upkeep and improvement expenditures..................................	2,400 rental properties and 4,500 owner-occupied units	Over 97 million units

Data user	Use
Bureau of Economic Analysis	Measure the structures components of the gross private domestic investment and state and local government expenditures in the GNP.
Council of Economic Advisers, Federal Reserve Board and other agencies	Determine condition of this key industry.
Private businesses (especially those providing construction materials)	Market planning, production scheduling, and investment planning.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing statistics											
Current industrial reports	Pos./BA	93	$4,328	108	$4,422	103	$4,402	93	$3,952	(10)	($450)
	FTE/Obl.	119	4,178	112		107		97		(10)	
Annual survey of manufacturers	Pos./BA	53	2,102	56	2,190	56	2,343	56	2,343	0	0
	FTE/Obl.	59	1,979	60		60		60		0	
Industrial indicators and business investment	Pos./BA	66	3,138	67	3,272	67	3,748	134	6,648	67	2,900
	FTE/Obl.	44	3,302	45		45		107		62	
Special industrial characteristics	Pos./BA	21	972	21	1,000	14	744	14	744	0	0
	FTE/Obl.	25	998	25		18		18		0	
Total	Pos./BA	233	10,540	252	10,884	240	11,237	297	13,687	57	2,450
	FTE/Obl.	247	10,537	242		230		282		52	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics

Goals and Objectives

Goals:

The goal of Manufacturing Statistics is to provide current statistics measuring the overall performance of the U.S. manufacturing sector, and the investment behavior of all U.S. businesses.

Objectives:

The objectives of Manufacturing Statistics are to maintain and improve the quality and timeliness of the statistics and to focus on national statistical needs; to provide monthly data on the manufacturing sector as an aid to government policymakers and business economists in their analyses of the business cycle and monitoring of the effect of imports on domestic production; to provide continuing annual data at the national level on major labor, capital, and manufacturing material inputs, outputs and important characteristics such as capacity utilization; and to provide continuing quarterly data at the national level on expenditures for plants and equipment by U.S. businesses.

Base Program

Current industrial reports. This program supplements the product data collected in the Census of Manufactures with current measures of manufacturing activity in the United States. The surveys provide current data on 5,000 of the 12,000 total manufactured products, representing 30 percent of the more than $2.5 trillion value of shipments of all manufactured goods. Production and shipments information are the two common data items collected, but the program also collects other measures such as inventories, orders and consumption in a number of surveys. These surveys measure manufacturing activity in important commodity areas such as textile and apparel, chemicals, primary metals, computer and electronic components, industrial equipment and consumer goods. The law requires seven of these surveys on a monthly basis and four on a quarterly basis.

The Current Industrial Reports program uses nearly 100 mail surveys with a unified data collection, processing and publication system. The Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based Annual Survey of Manufactures and the Census of Manufactures. The content of each survey is updated periodically to ensure that the data continue to meet the needs of government and industry data users. To further improve the usefulness of the Current Industrial Reports program, the Census Bureau is increasing emphasis on the development and implementation of surveys which focus on the production of emerging technologies.

Program output	Sample size	Universe
Monthly, quarterly and annual data on production of about 5,000 manufactured products.................................	43,000 manufacturing establishments	369,000 manufacturing establishments

Data user	Use
Federal Reserve Board......................	Prepare monthly index of industrial production.
Bureau of Economic Analysis................	Prepare quarterly estimates of GNP.
International Trade Administration, International Trade Commission...........	Monitor effect of international trade on domestic production and meet responsibilities under Trade Act of 1974; assess production trends; and forecast future industrial activity.
Bureau of Labor Statistics.................	Develop price indexes and estimates of productivity.
Private industry...........................	Monitor effect of international trade on domestic production, evaluate relationship between company and industry performance, market analyses, assess current business conditions, and plan future operations.

Annual survey of manufactures. This program supplies the key annual measures of manufacturing activity. The data items include employment, payrolls, supplementary labor costs (fringe benefits), cost of materials, fuels consumed and capital expenditures; and output data such as shipments by industry and product class, shipments for export, and inventories by stage of fabrication. National estimates are provided by industry classifications as defined in the Standard Industrial Classification (SIC) for about 1,500 product classes. In addition, the program also compiles basic statistics such as employment and value of shipments for states.

Program output	Sample size	Universe
Annual statistics on inputs used and outputs produced by manufacturers..................	56,000 manufacturing establishments	369,000 manufacturing establishments

Data user	Use
Bureau of Labor Statistics..................	Calculate annual productivity series, update producer price indexes, and calculate weights when new components are added.
Federal Reserve Board........................	Prepare Index of Industrial Production.
Bureau of Economic Analysis..................	Prepare annual update of GNP and weight GNP deflators.
International Trade Administration...........	Design and evaluate export development program.
Commerce Industrial Outlook publication......	Evaluate and forecast future industrial activity.
Census Bureau................................	Benchmark and reconcile monthly and quarterly data on manufacturing production and inventories.
Private industry.............................	Plan operations, and make investment and production decisions.

Industrial indicators and business investment. The Manufacturers' Shipments, Inventories and Orders Survey (M3) provides the indicators of monthly changes and trends for the entire U.S. manufacturing sector. This report is one of the principal economic indicators for the United States. The shipments data are important coincident indicators of the business cycle; new orders and inventories are important leading indicators. The Wall Street Journal and the financial pages of other newspapers and magazines consistently highlight this information.

The Manufacturers' Shipments, Inventories and Orders Survey provides monthly data on the dollar volume of shipments, new and unfilled orders, and total inventories for 46 industry categories and 6 market categories. Also provided are data on inventories by stage of fabrication for 16 broader industry groups and separate data for household durables and the defense and non-defense portions of the capital goods industries. The Annual Survey of Manufactures data for the corresponding year are used to make historical benchmark revisions to shipments and inventory estimates.

The Plant and Equipment Expenditures Survey is another principal economic indicator for the United States. This survey provides critical data on investment plans in the manufacturing sector at the 2-digit Standard Industrial Classification (SIC) level and the non-manufacturing sectors by broad categories. It also provides data on actual investments as a current indicator of production capacity. The business sectors that account for a large proportion of investments are surveyed quarterly. The results of this survey are also prominently discussed in The Wall Street Journal and the financial pages of other newspapers and magazines.

Program output	Sample size	Universe
Monthly statistics on manufacturers' shipments, inventories, and new and unfilled orders.	4,100 manufacturing companies and divisions	318,000 manufacturing companies
Quarterly statistics on actual and planned expenditures on plant and equipment.	15,000 companies	4.5 million companies
Annual statistics on expenditures for plant and equipment.	25,000 companies	4.5 million companies

Data user	Use
Bureau of Economic Analysis....................	Prepare monthly index of leading economic indicators and quarterly estimates of GNP.
Council of Economic Advisers, Federal Reserve Board, and Departments of Commerce and Treasury, Congressional Budget Office.........	Analyze economic conditions, forecast future trends, and determine current economic policy.
Census Bureau.................................	Benchmark and reconcile monthly data on value of construction and quarterly data on expenditures for plant and equipment.
Private industry..............................	Plan operations, and make investment and production decisions.

Special industrial characteristics. The periodic surveys of Pollution Abatement Costs and Expenditures and the Plant and Equipment Pollution Abatement Expenditures surveys provide comprehensive estimates of capital expenditures and operating costs associated with pollution abatement activities by manufacturers and capital expenditures for selected nonmanufacturers' businesses. Because pollution abatement expenditures compete with productivity improvements for investment dollars, it is important to measure this cost component.

The Census Bureau collects separate data for capital expenditures and types of operating costs associated with the abatement of air and water pollutants and solid waste disposal for each manufacturing industry. The survey also includes payments to governments for pollution removal. State level data are published for major industry groups.

The Survey of Plant Capacity relates the actual level of manufacturing activity to the full production capability level of operation for the fourth quarter of the calendar year. The survey includes selected characteristics of manufacturing establishments such as the number of hours of plant operation and reasons for operating at less than full capacity. These establishment-based capacity utilization estimates show how changes in utilization rates affect important economic factors such as inflationary pressures, business investments and economic growth. Capacity utilization rates cover 4-digit Standard Industrial Classification Code (SIC) industries at the national level.

Program output	Sample size	Universe
Annual Survey of Pollution Abatement Costs and Expenditures...........................	16,000 establishments with 20 or more employees (subsample of the Annual Survey of Manufactures)	369,000 manufacturing establishments
Plant and Equipment Pollution Abatement Expenditures Survey.........................	500 companies (subsample of Plant and Equipment Expenditures Survey).	15,000 petroleum, mining, and electric utility
Annual Survey of Plant Capacity.............	9,000 establishments (subsample of the Annual Survey of Manufactures)	369,000 manufacturing establishments companies

Data user	Use
Pollution abatement:	
Bureau of Economic Analysis...............	Prepare estimates of capital expenditures and current costs for pollution abatement for GNP accounts.

Data User (cont'd)	Use
Environmental Protection Agency...........	Evaluate the effect of environmental legislative proposals and monitor regional environmental performance.
State and local governments and industrial organizations..............................	Develop regional economic and environmental performance measures and forecasts.
Private industry...........................	Formulate planning and investment decisions.
Private industry..............................	Formulate planning, investment and production decisions.
Plant capacity:	
Federal Reserve Board.......................	Benchmark current estimates of company capacity utilization.
International Trade Administration..........	Identify industries adversely affected by import penetration.
Economic Development Administration.........	Identify industries which warrant economic assistance.
Other government agencies...................	Evaluate industry's ability to expand and meet a crisis, particularly in defense related industries.
Private industry..............................	Formulate planning, investment and production decisions.

Department of Commerce
Bureau of the Census
Salaries and Expenses
DECREASE FOR FY 1991
(Direct Obligation in thousands)

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Current industrial reports...	Pos./BA	103	$4,402	93	$3,952	(10)	($450)
	FTE	107		97		(10)	

Current industrial reports It has been decided to eliminate selected lower priority current industrial reports. Therefore, this line item has been reduced by 10 positions, 10 FTE, and $450,000.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics
Program Change: Eliminate selected Current Industrial Reports

Object Class		1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	($310)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(310)
12.1	Civilian personnel Benefits	(57)
13	Benefits for former personnel	0
21	Travel and transportation of persons	(1)
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	(51)
23.3	Communications, utilities and miscellaneous charges	(15)
24	Printing and reproduction	(10)
25	Other services	(4)
26	Supplies and materials	(1)
31	Equipment	(1)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	(450)

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial indicators and business investment.......	Pos./BA	67	$3,748	134	$6,648	67	$2,900
	FTE	45		107		62	

Investment survey (43 permanent positions, 38 FTE, and $2,000,000). Business investment and capital goods data are critical to evaluating productivity growth, competitiveness, capacity utilization, and the projection of overall economic performance of U.S. industries. This initiative provides an annual survey to collect new and anticipated investment data from all business sectors at the national level using a probability sample. The information sources currently used to estimate investment are inconsistent and incomplete. As a result, important fiscal and monetary policy decisions can be adversely affected.

In addition to providing new information on evaluating industrial productivity, competitiveness and capacity utilization, this proposed annual survey on investment will serve as a benchmark and statistically defensible frame for conducting the quarterly Plant and Equipment Expenditure Survey of New and Planned Investments, which was transferred to the Census Bureau from the Bureau of Economic Analysis in FY 1989. The purpose of the transfer is to improve the statistical soundness of the survey which has been severely criticized for not using statistical probability techniques in its estimation and for poor response. The proposed annual survey is critical to this effort.

The data collected will be actual expenditures for new and modernized plants, purchases of specific types of equipment including pollution abatement, information on leased plants and equipment, investments in capital goods from foreign sources, and expenditures for non-residential alterations, repairs and maintenance; and planned expenditures for the coming year. This amount of detail is critical in measuring the differential effects of technological, price and regulatory changes on production facilities in analyzing productivity growth, ability of the U.S. business sector to compete with foreign producers, utilization of plant capacity, and overall economic performance. The current measures of investment provide only gross measures of equipment and structures expenditures.

Development of the annual survey will be completed in FY 1991; actual data collection will begin in FY 1992; data will be reported beginning mid-1992.

Manufacturers' Shipments, Inventories and Orders (M3) Survey (24 permanent positions, 24 FTE and $900,000). The M3 Survey is currently the only source of broad based monthly statistical data on the economic conditions in the U.S. domestic manufacturing sector. These data provide critical information in the short term for assessing economic cycles and trends. They influence fiscal and monetary policy decision-making in the public sector and provide investment, marketing and production information to the private sector.

This initiative will provide improvements in the quantity and quality of responses to the M3 Survey, a reduction in the reporting burden per respondent through the introduction of a probability sample, and an investigation of collection of additional items of current economic relevance such as orders for export. Quantity and quality response improvements are essential. Quantity improvements will be based on increasing responses to the survey by large companies through intensified direct contact (personal visits) with company officials responsible for external reporting. A probability sample of medium and smaller companies will be implemented based on experience with a probability sample of the plastics industry now being tested. The probability sample will be designed to minimize the reporting burden per respondent through rotating samples or other innovative sampling techniques. As a by-product of direct contacts with the companies, the Census Bureau plans a response profile study to determine why some companies do not respond to surveys. Results of this will improve the Bureau's outreach techniques and have long-term effects on the quality of current economic data.

Improvement in the quality of responses is essential with large company respondents. The goal is to improve reporting of industry details through the intensifies company visit program. Negotiations will be conducted emphasizing the adaption of data already available within these companies' accounting procedures to the industry categories needed in the survey.

The Census Bureau plans to study the collection of additional data which have significant impact on the current status of the U.S. economy. With the continued importance of data on foreign trade, there is need for an indicator on future export activity. Intense negotiations with companies are necessary to assess the availability of information on orders for export and to solicit their cooperation in providing the data.

The annual data providing the benchmarks for the monthly survey will be improved by conducting a classification survey of new plants starting production each year to ensure adequate statistical representation. Currently, some portion of new plants are not assigned industry codes each year by the Social Security Administration. Data for these new plants are not included in the annual statistics until the new establishments have been classified in the Census of Manufactures which is conducted every five years. This results in understatement of annual estimates by a significant amount in selected industries and distortion of the year-to-year change data.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics
Program Change: Investment survey

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$984
11.3	Other than full-time permanent	40
11.5	Other personnel compensation	56
11.8	Special personnel services payments	0
11.9	Total personnel compensation	1,080
12.1	Civilian personnel Benefits	273
13	Benefits for former personnel	0
21	Travel and transportation of persons	19
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	140
23.3	Communications, utilities and miscellaneous charges	65
24	Printing and reproduction	160
25	Other services	146
26	Supplies and materials	56
31	Equipment	61
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	2,000

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics
Program Change: Investment survey

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		14	2	$52,104	$104,208
Mathematical statistician		14	1	52,104	52,104
Statistician		13	3	44,092	132,276
Economist		13	2	44,092	88,184
Mathematical statistician		13	1	44,092	44,092
Supervisory computer systems analyst		13	1	44,092	44,092
Statistician		12	5	37,079	185,395
Mathematical statistician		12	2	37,079	74,158
Programmer		12	5	37,079	185,395
Program analyst		12	2	37,079	74,158
Statistician		11	2	30,937	61,874
Mathematical statistician		11	1	33,372	33,372
Programmer		11	2	30,937	61,874
Program analyst		11	1	30,937	30,937
Statistician		9	1	25,570	25,570
Programmer		9	2	25,570	51,140
Computer operator		9	1	25,570	25,570
Program analyst		9	1	25,570	25,570
Statistician		7	1	20,902	20,902
Computer operator		7	1	20,902	20,902
Statistical assistant		5	2	16,876	33,752
Secretary		5	1	18,564	18,564
Clerk typist		5	2	18,564	37,128
Clerk typist		4	1	17,095	17,095
Total			43		1,448,312
Less lapse	32.04%		(11)		(464,039)
Total full-time permanent			- 32		984,273

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	32
Other than full-time permanent	6
Total	38
Authorized Positions:	
Full-time permanent	43
Other than full-time permanent	10
Total	53

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Current economic statistics
Subactivity: Manufacturing statistics
Program Change: Manufacturers' shipments, inventories and orders

	Object Class	1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$431
11.3	Other than full-time permanent	67
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	498
12.1	Civilian personnel Benefits	122
13	Benefits for former personnel	0
21	Travel and transportation of persons	50
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	75
23.3	Communications, utilities and miscellaneous charges	40
24	Printing and reproduction	1
25	Other services	2
26	Supplies and materials	49
31	Equipment	63
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	900

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics
Program Change: Manufacturers' Shipments, Inventories, and Orders

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		13	1	$44,092	$44,092
Statistician		12	3	37,079	111,237
Mathematical statistician		12	1	37,079	37,079
Programmer		11	1	30,937	30,937
Program analyst		11	2	30,937	61,874
Programmer		9	3	25,570	76,710
Program analyst		9	2	25,570	51,140
Statistical assistant		9	3	25,570	76,710
Programmer		7	3	20,902	62,706
Program analyst		7	2	20,902	41,804
Statistical assistant		5	2	16,876	33,752
Clerk		3	1	16,125	16,125
Total			24		644,166
Less lapse	33.09%		(6)		(213,561)
Total full-time permanent			18		430,605

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	18
Other than full-time permanent	6
Total	24
Authorized Positions:	
Full-time permanent	24
Other than full-time permanent	24
Total	48

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
General economic statistics											
Standard statistical establishment list	Pos./BA	96	$5,073	103	$5,188	103	$5,491	103	$5,491	0	0
	FTE/Obl.	111	4,984	105		105		105		0	
County business patterns	Pos./BA	19	957	21	989	21	1,057	21	1,057	0	0
	FTE/Obl.	20	1,128	19		19		19		0	
Industry & commodity classification	Pos./BA	7	557	29	1,313	29	1,497	33	1,872	4	$375
	FTE/Obl.	4	489	32		35		41		6	
Economic studies	Pos./BA	8	457	12	881	8	946	8	1,146	0	200
	FTE/Obl.	9	453	11		7		7		0	
Quarterly financial report	Pos./BA	42	1,935	42	1,975	42	2,063	42	2,063	0	0
	FTE/Obl.	48	1,917	47		47		47		0	
Total	Pos./BA	172	8,979	207	10,346	203	11,054	207	11,629	4	575
	FTE/Obl.	192	8,971	214		213		219		6	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: General economic statistics

Goals and Objectives

Goals:

The goals of General Economic Statistics are to provide a centralized list of all U.S. business firms and their establishments; to provide uniform industry and commodity classification and coding; to publish County Business Patterns data; and to provide corporate financial statistics.

Objectives:

The objectives of General Economic Statistics are to maintain and update the Standard Statistical Establishment List (SSEL); to coordinate the development, maintenance, revision, and evaluation of industry and commodity classification and coding programs; to maintain and improve the quality of the data; and to continue the focus on data pertinent to national needs.

Base Program

Standard statistical establishment list (SSEL). The SSEL includes the latest available information on name, mailing address, physical location, industrial classification, size classification, company affiliation and legal form of organization for all employer firms and their establishments in the United States. This program provides the single source for determining and assigning industrial classifications to establishments and companies. It also provides a common frame of reference for use in selecting statistical samples.

Preparation of the SSEL reflects the continued coverage of multiple establishment businesses based on the Company Organization Survey (COS). The program includes updating the industrial classification for businesses, incorporating the changes in the company organization and geographic codes on a periodic basis, and operating the updated universe file for statistical users of the system.

The SSEL program also includes efforts to determine the business universe by compilation of administrative records for single establishment companies. The Census Bureau purchases quarterly and annual payroll data and March 12 pay period employment data from the Internal Revenue Service. These data serve as a proxy for millions of small firms and excuse these firms from directly reporting to the Census Bureau.

Program output	Sample size	Universe
Standard Statistical Establishment List (Annual Company Organization Survey)....................	55,000 largest multi-establishment companies (900,000 establishments) and a rotating sample of smaller multi-establishment companies (100,000 establishments)	125,000 active companies (1.2 million) establishments

Data user	Use
Economic censuses, Census of Agriculture, County Business Patterns (CBP), Annual Survey of Manufactures, and business surveys...	Provide an updated universe file for census mailing lists and sample selection, benchmarking, disclosure analysis, identification of business births and deaths, and other centralized control processes essential for supporting Census Bureau's statistical programs.

County business patterns (CBP). This program consolidates selected data from the SSEL to provide summary totals for the universe of business establishments at the 4-digit Standard Industrial Classification (SIC) level. The CBP program provides total employment; first quarter and annual payroll; total number of establishments; and number of establishments by employment size class for each county and state, District of Columbia, and Puerto Rico. These data are essential for benchmarking applications to verify independent statistical series, surveys and data bases during the intercensal years.

CBP is the only source of 4-digit Standard Industrial Classification detail at the county level for most economic activities. This detail provides an accurate accounting of the kinds of businesses located in a geographic area and enables comparisons between similar areas.

The Census Bureau tabulates these data at the state and county levels in publication, tape or diskette format.

Data user	Use
Office of Personnel Management; Departments of Defense, Energy, Agriculture, and Housing and Urban Development; Bureau of Labor Statistics; Bureau of Economic Analysis; and state and local governments.............	Determine location and concentration of establishments and employment for developing regulations and occupational safety and health standards; determine employment concentrations and trends by industry for placement of disabled employees; and provide small area statistics needed to administer Federal, state and local government programs.
Private businesses, market researchers, and industrial and civic planners...............	Analyze market potential; determine size and locations of sales territories; establish sales quotas and advertising budgets; and locate production, marketing, and service facilities.

Industry and commodity classification. This program includes review and development of industry classification, report forms and coding procedures. This process assures that Census Bureau operations are complete, consistent and comparable with OMB and other agency standards. The program is represented on the Standard Industrial Classification Technical Committee, which coordinates industry classification with OMB and other government agencies. The program provides answers to inquiries and serves as a focal point for interpreting the various systems used by the general public. It prepares coding manuals and develops procedures for coding report forms which are problems in more than one Census area or do not belong in the area for which they were mailed. In addition, it develops classifications, report forms and procedures for coding establishments which are not in the scope of the economic censuses; therefore, are not covered by any other Census Bureau program.

The Industry and Commodity Classification program reviews and coordinates efforts to develop, maintain and revise production, export and import classifications. As a corollary to such activities, the program provides research on classification and coding problems, evaluation studies and continuing efforts to improve the classification system and coding methods. The Trade Act of 1974 recognized the importance of the resulting data relationships by mandating the development of an enumeration system which provides comparability among U.S. import, production and export data. The experience and expertise developed for this program provide the basic systematic knowledge and commodity correlations needed to meet the requirements for commodity comparability.

The program is also responsible for coding those 400,000 annual applications (Form SS-4) for new employer identification numbers which were assigned unclassified or inadequate Standard Industrial Classification (SIC) codes by the Social Security Administration. All new employer identification numbers and their associated Standard Industrial Classification codes, as assigned by the SSA, are incorporated into current Census Bureau programs, including the Standard Statistical Establishment List. Correction of these unclassified or inadequately classified businesses improves the quality of Census programs and the resulting economic data.

In addition, the Industry and Commodity Classification program issues an annual report, U.S. Commodity Exports and Imports as Related to Output, which compares U.S. exports of domestic merchandise, imports for consumption, and domestic output in terms of the Standard Industrial Classification. In relating export, import and production classifications, the program provides correlations among systems and data relationships which are not available from any other source.

As a joint effort with the Bureau of Labor Statistics, the Census Bureau also publishes a quarterly report, Trade and Employment, which compares imports, exports, and domestic employment in terms of the Standard Industrial Classification. The Census Bureau provides the programs necessary to generate the publications; Bureau of Labor Statistics supplies the related employment data. The Trade and Employment Program reflects changes in the volume of imports and exports; changes in employment within domestic industries producing similar articles or directly competitive with imports; and the extent of adverse effects on domestic employment caused by changing international trade patterns.

Data user	Use
Bureau of Labor Statistics, Bureau of Mines, Department of Agriculture, Bureau of Economic Analysis, International Trade Administration...	Analyze trends in the volume of imports and exports to determine the effects on U.S. domestic industries, production and employment.
Researchers in private sector and universities.............................	Provide research material to analyze the effects of international trade on U.S. domestic industries.

Economic studies. The Economic Studies Program supports the Census Bureau's economic measurement activities through analysis and research, enhancing the quality of economic measures. The program assembles, maintains and extends the Longitudinal Research Database (LRD) and links it to other databases such as the National Science Foundation and Census Bureau's research and development surveys. It also maintains the Characteristics of Business Owners database (CBO). These, as well as other industrial data, are provided in forms conducive for analysis and research by economic policymakers and researchers throughout the government.

The Economic Studies program selects particular measurement issues based on their quantitative importance and susceptibility to resolution. Increased use of economic data in analytic and research work substantially increases the knowledge and limitations of the data, allowing the Census Bureau to improve economic measurements and analysis activities.

To accomplish the program objectives, the Census Bureau collaborates with outstanding researchers in joint initiatives using the LRD, CBO and other compilations of the Census data. Such initiatives improve the Bureau's processing procedures as well as the underlying conceptual basis of its economic data. These studies include analysis of the patterns and changes in economic structure, with particular reference to the relationship of the data reported to the information compiled in other surveys; linkage of corporate financial data with census establishment data; improvements in the techniques measuring and explaining the efficiency and competitiveness of U.S. business enterprises in the global economy; studies on the characteristics of business owners; and analysis of high-tech trade.

This program also provides for the Census Bureau's participation in the development and operation of the National Trade Bank (NTDB), which is required by the Omnibus Trade and Competitiveness Act of 1988 (Subtitle E, Part I). The NTDB is a single source of trade-related information available to the public and private sectors. Economic Affairs/Office of Business Analysis (OBA) serves as the data bank manager with advice of the Interagency Trade Data Advisory Committee (ITDAC) on the content, structure, and operation of the data bank. The Census Bureau assists Economic Affairs/OBA in the management of the NTDB, in the design and control of the electronic dissemination of the material, in the representation of the Department of Commerce on the ITDAC, in the coordination of the program, and provides data for the International Economic Data System (IEDS) component of the data bank.

The principal data distribution medium is the Compact Disk -- Read Only Memory (CD-ROM) -- which is a very efficient and inexpensive means to distribute data to the public. NTDB data is also available via magnetic tape. Direct online access to the data bank is not available to the public via Government computers; rather, distributors obtain NTDB information from the data bank in bulk form and are encouraged to make online access and value-added services available to their customers. These distributors include State development agencies, nonprofit organizations, Federal depository libraries, the National Technical Information Service, the Government Printing Office, private sector information vendors, and Department of Commerce Field Offices.

Quarterly financial report (QFR). This program collects and reports current information on corporate financial conditions. Based on an extensive sample survey, the Quarterly Financial Report is a principal economic indicator and also a component of other statistical indicators. The report presents key financial statistics including sales, profits, assets, liabilities, stockholders' equity, and related accounts and ratios. It provides industry and asset size data for small, medium, and large manufacturing corporations; and provides data for corporations with more than $50 million in assets in the wholesale, retail, and mining sectors.

Program output	Sample size	Universe
Quarterly Financial Report.............	About 10,000 corporations	About 1 million

Data user	Use
Bureau of Economic Analysis............	Construct national income accounts.
Federal Reserve Board..................	Construct flow of funds accounts.
Small Business Administration..........	Analyze small manufacturing business sector.
Other public and private sector users..	Analyze corporate profits and financial conditions by industry and asset size.

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Dollar amounts in thousands)

Activity: Current economic statistics programs
Subactivity: General economic statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Industry and commodity classification...........	Pos/BA	29	$1,497	33	$1,872	4	$375
	FTE	35		41		6	

Standard industrial classification (SIC) research (4 permanent positions, 6 FTE, and $375,000). The SIC system is one of the most important tools developed to promote comparability of establishment statistics describing various facets of the U.S. economy. The 1987 SIC revision was the first major revision in 15 years, and while it brought significant improvements, continuing research is still necessary in the proper classification structure for newly emerging industries, speicifically those in the expanding sector, and in measuring the impact of the Harmonized System on the industry classification system.

In FY 1991, the Census Bureau will conduct research in the following areas:

- o How structural changes in establishment operations impact on the SIC coding;
- o Methods for identifying new technologies and new industries;
- o The impact of contract services on SIC coding;
- o Methods of increasing industry comparability with the Harmonized System.

In planning the future SIC revisions, the Census Bureau will conduct research into the methods of developing the criteria for all SIC divisions, and the specialization and coverage ratios for the nonmanufacturing sectors.

Deprtment of Commerce
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Salaies and Expenses
PROGRAM CANGE DETAIL BY OBJECT CLASS
(Directobligations in thousands)

Activity: Current economic statistics programs
Subactivity: General Economic Statistics
Program Change: Standard Industrial Classification researcl

Object Class		1990 Increase
11	Personnel compensation	
11.1	Full-time permanent	
11.3	Other than full-time permanent	$83
11.5	Other personnel compensation	54
11.8	Special personnel services payments	0
		0
11.9	Total personnel compensation	
12.1	Civilian personnel Benefits	137
13	Benefits for former personnel	27
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	17
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	192
31	Equipment	2
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
		0
99	Direct obligations	
		375

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: General Economic Statistics
Program Change: Standard Industrial Classification research

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		12	2	$37,079	$74,158
Statistician		11	1	30,937	30,937
Secretary		5	1	18,564	18,564
Total			4		123,659
Less lapse	32.68%		(1)		(40,412)
Total full-time permanent			3		83,247

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	3
Total	6
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	3
Total	7

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: General economic statistics

		1991 Base		1991 Estimate		Increase/(Decrease	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Economic studies.......	Pos./BA	8	$ 946	8	$1,146	0	$ 200
	FTE	7		7			

Increased funds to develop additional data sources for the National Trade Data Bank (NTDB). (0 permanent positions, 0 FTE, and $200,000). The Omnibus Trade and Competitiveness Act of 1988 (Subtitle E. Part I) calls for the Department of Commerce to establish and operate the NTDB by August 23, 1990. This budget increase covers the participation by the Bureau of the Census/Economic Affairs to develop the National Trade Data Bank (NTDB). Economic Affairs is responsible for overall management of the NTDB, for design and control of the electronic dissemination of the material in the NTDB, for representation of the Department in the meetings of the Interagency Trade Data Advisory Committee, and for general interdepartmental coordination of the program.

The initial version of the NTDB is expected to contain a "core" set of statistics and trade related information that will gradually expand over the years as additional data and resources become available. We expect information and systems development funds to be used in outyears to support the addition of Federal data and to add material from international organizations. This increase will, specifically, fund additional data source activities which will include:

-- Design and development of training materials necessary for use and operation of the NTDB CD-ROM by outside users, e.g., the Federal Depository Libraries, and private sector information vendors.

-- A complete National Trade Data Bank must include data from international organizations to enable analysts to examine the world economy, not just trade between the U.S. and its trading partners. Further development work will be needed to convert international organization (United Nations (UN), Organization for Economic Cooperation and Development (OECD), International Monetary Fund (IMF) data to the NTDB prescribed format. Also, these funds will be used to research possibilities of using information from these sources and the costs that will be incurred as royalty fees. This work is planned to occur in outyears.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: General economic statistics
Program Change: National trade data bank

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	$200
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	200

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Foreign trade statistics											
Import statistics	Pos./BA	195	$7,810	207	$8,033	207	$8,553	207	$8,553	0	0
	FTE/Obl.	195	7,820	190		190		190		0	
Export statistics	Pos./BA	152	5,903	164	6,055	164	6,444	164	6,444	0	0
	FTE/Obl.	153	5,808	150		150		150		0	
Trade monitoring	Pos./BA	36	2,068	42	2,125	42	2,384	55	2,884	13	$500
	FTE/Obl.	36	2,068	35		35		45		10	
Total	Pos./BA	383	15,781	413	16,213	413	17,381	426	17,881	13	500
	FTE/Obl.	384	15,696	375		375		385		10	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Foreign trade statistics

Goals and Objectives

Goals:

The goal of Foreign Trade Statistics is to provide current U.S. statistics on imports and exports of all types of merchandise and commodities, including the mode of transportation.

Objectives:

The objectives of this subactivity are to maintain and improve the dependability, quality and timeliness of the official U.S. export and import statistics; to implement improved data collection procedures; to streamline, simplify, and reduce the reporting process to the maximum extent possible; and to conduct activities required by law (Trade Act of 1974, Trade Agreements Act of 1979, the Omnibus Trade and Competitiveness Act of 1988 and the Canadian Free Trade Agreement).

Base Program

Import statistics. This program compiles monthly foreign trade statistics from information filed with the U.S. Customs Service. Import statistics are compiled for shipments valued over $1,250 except for selected commodities valued over $250. Data for shipments valued under $1,251 (under $251 where applicable) are developed through a statistical estimating procedure. The monthly and cumulative year-to-date statistics summarize merchandise imports in terms of the commodity classifications of the Harmonized Tariff Schedules of the United States Annotated (HTSUSA), by country of origin and by customs district of entry. Additional reports interrelate data covering major commodities and groupings in terms of the Standard International Trade Classification (SITC), Standard Industrial Classification (SIC), end-use codes, and coverage by geographic and political areas. The program produces a series of monthly and annual reports, reference tabulations and publications covering government and private-sector imports of merchandise into the United States, Puerto Rico and the Virgin Islands for immediate consumption as well as into (and withdrawals from) Customs-bonded warehouses and foreign trade zones. The series show quantity (where applicable), Customs value and for selected reports, C.I.F. value (i.e. valuation which includes the cost of merchandise based on Customs value, plus insurance and freight charges). Separate aggregations show movement by method of transportation (vessel, air, other) and provide data on U.S. port of unloading, foreign port of loading, country of origin, type of vessel service and flag of vessel.

Also, this program provides statistical reports required by the Committee for Implementation of Textile Agreements for monitoring textile imports from all countries which have bilateral textile agreements with the United States.

Trade legislation requires compilation of information on imports under the Generalized System of Preferences (GSP), the Caribbean Basin Initiative (CBI) and the Canadian Free Trade Agreement as well as special provisions for handling imports from developing countries.

Program output	Sample size	Universe
Monthly and annual import trade statistics.........	All transactions over $1,250 (over $250 where applicable)	1,000,000 per month

Data user	Use
Bureau of Economic Analysis, Council of Economic Advisers, Federal Reserve Board, and Department of Treasury..	Develop the import components of the merchandise trade figures for the balance of payments and GNP accounts.
U.S. Trade Representative.........................	Negotiate and measure the effect of tariff and trade concessions under the General Agreement on Tariffs and Trade (GATT).
Department of Commerce............................	Implement and monitor international agreements such as the United States/Canadian Free Trade Agreement as well as bilateral agreements on quotas for textiles, steel, meat, footware and television sets.

Data User (cont'd)	Use
U.S. International Trade Commission..................	Measure the effect of U.S. tariffs on import levels. Measure effects of import trade on the U.S. market and domestic industry.
Private sector....................................	Analyze product and market development, share-of-the market, and market penetration.
Government and non-government transport industry...	Vessel and air data to measure market share, competitive status, plan promotional activities, and need for additional new types of facilities.

Export statistics. This program compiles mo thly export statistics from export documents collected by
the U.S. Customs Service and from informatio provided directly to the Census Bureau by exporters and
freight forwarders. This information covers all shipments individually valued over $2,500 for all
countries; however, the Census Bureau estima es data for shipments valued under $2,501 for individual
countries. The monthly and cumulative year-o-date statistics summarize merchandise exports in terms
of the commodity classifications of Schedule B, by country of destination and by U.S Customs district
of exportation. Other reports show and inte relate data covering major commodities and groupings in
terms of the Standard International Trade Cl ssification (SITC), Standard Industrial Classification
(SIC) and end-use codes, and coverage by geo raphic and political areas. Data items include movement
of exports by vessel and air with informatio on value, quantity and shipping weight, U.S. port of
loading, foreign port of unloading, commodit , country of destination, type of vessel service, and flag
o' vessel.

The export statistics include nongovernmenta shipments to foreign countries, including shipments from
Foreign Trade Zones, a well as government sh pments (i.e., Department of Defense Military Assistance
Program, Grant-Aid shipments, economic assis ance shipments, and shipments of agricultural commodities
under P.L. 83-480).

Program output	Sample size	Universe
Monthly and annual export trade statistics	All transactions over $2,500	1,000,000 per month

Data user	Use
Bureau of Economic Analysis, Council of Economic Advisers, Federal Reserve Board, and Department of Treasury....................................	Develop the export component of merchandise trade figures for the balance of payments and GNP accounts.
Department of Agriculture.......................	Monitor, evaluate and plan agricultural development programs and quotas.
Department of Commerce..........................	Implement and monitor international agreements such as the United States/Canadian Free Trade Agreement; promote export growth through the export promotion program.
U.S. Trade Representative.......................	Conduct trade negotiations under the GATT.
Bureau of Labor Statistics......................	Sampling for export price indexes.
Congress..	Monitor agency programs relevant to export expansion, quotas and controls.
Government and non-government transport industry....................................	Vessel and air data to measure market share, competitive status, plan promotional activities, need for new facilities, etc.
Private sector..................................	Employ the data in share-of-the-market analyses and market penetration studies; determine marketing policies and strategies.

Trade Monitoring. This program covers the Census Bureau responsibilities under the Trade Act of 1974, particularly Section 608 (Uniform Statistical Data on Imports, Exports and Production), Title V (Generalized System of Preferences) and Section 282 (Trade Monitoring System). Section 608 provides data on imports, exports and domestic production on a comparable basis. The commodity classification systems are revised on a regular basis, modified to reflect changing statistical needs and to improve comparability of trade and domestic production data as well as the comparison of trade data between the United States and other countries.

Title V of the Trade Act of 1974 requires data to monitor imports from designated countries and to evaluate the economic effects of the Generalized System of Preferences (GSP). The latter provides duty-free access to the U.S. market by developing countries. The compilation of GSP import data provides the means for analyzing the effectiveness of the Trade Act to promote exports and economic development in beneficiary countries. The data also provide the basis for changes in eligibility whenever GSP imports from a beneficiary country trigger the need for competitive limitations.

Section 282 of the Trade Act of 1974 requires data to monitor the relationship between imports and U.S. employment, and production by geographic region, assisting in the identification of areas affected by imported articles.

Section 608 of the Trade Act of 1974 requires the publication of Current Industrial Reports to enhance the comparability of imports, exports, and domestic production statistics. This requires continuous revisions of the import, export and output classification systems to promote comparability with the new international Harmonized System. Import and export computer programs are revamped to accommodate the creation of over 20 million computer records annually. In addition, processing procedures and programs are revised to handle the anticipated increase in defective documents. Meetings and seminars with exporters, importers, producers, Customs import specialists, and Census Bureau staff are required to coordinate processes to reduce the expected reporting problems and defective documents.

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Foreign trade statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Trade Monitoring............	Pos./BA	42	$2,384	55	$2,884	13	$500
	FTE	35		45		10	

Improve foreign trade statistics (13 permanent positions, 10 FTE and $500,000). Because there is a suspicion of a significant undercount of exports, this enhancement provides for a comprehensive program to assess and improve the quality of foreign trade data including the verification of reported data, audits of Customs port operations to measure suspected export undercount, an education program directed to exporters, importers and brokers, and a continuing review of the editing and imputation methods used in compiling the statistics.

This program includes conducting mail and telephone surveys of exporters to verify and correct statistical data; verifying import data using commercial documents required at the time of importation; conducting continual on-site audits of operations and documentation at ports of exit to measure export undercount, devise corrective actions, improve communication and coordination between participating agencies and the trade community and correct the statistical data where necessary; increasing the current educational effort directed at errant respondents, i.e., exporters, importers, or brokers; and studying the process of compiling the data in the areas of editing and imputation to develop means of measuring error which results from processing techniques.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Foreign trade statistics
Program Change: Improve foreign trade statistics

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$300
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	300
12.1	Civilian personnel Benefits	82
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	49
24	Printing and reproduction	0
25	Other services	25
26	Supplies and materials	30
31	Equipment	2
32	Lands and structures	12
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	500

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current economic statistics programs
Subactivity: Foreign trade statistics
Program Change: Improve foreign trade statistics

Title:		Grade	Number	Annual Salary	Total Salaries
Supervisory mathematical statistician		14	1	$52,104	$52,104
Economist		14	1	52,104	52,104
Mathematical statistician		13	1	44,092	44,092
Statistician		13	1	44,092	44,092
Mathematical statistician		12	1	37,079	37,079
Statistician		12	1	37,079	37,079
Programmer		12	1	37,079	37,079
Mathematical statistician		11	1	33,372	33,372
Statistician		11	1	30,937	30,937
Programmer		11	1	30,937	30,937
Statistician		7	1	20,902	20,902
Secretary		5	1	18,564	18,564
Clerk typist		4	1	17,095	17,095
Total			13		455,436
Less lapse	34.16%		(3)		(155,577)
Total full-time permanent			10		299,859

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	10
Other than full-time permanent	0
Total	10
Authorized Positions:	
Full-time permanent	13
Other than full-time permanent	0
Total	13

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Government statistics											
Government finance survey	Pos./BA	34	$1,496	34	$1,535	28	$1,428	28	$1,428	0	$0
	FTE/Obl.	33	1,518	27		21		21		0	
Survey of government employment	Pos./BA	12	536	15	547	15	580	15	580	0	0
	FTE/Obl.	12	561	12		12		12		0	
Tax and intergovernmental revenue	Pos./BA	40	1,542	44	1,616	44	1,720	44	1,720	0	0
	FTE/Obl.	39	1,508	41		41		41		0	
Formula grant data	Pos./BA	19	813	22	815	22	874	22	874	0	0
	FTE/Obl.	19	703	19		19		19		0	
Federal reporting systems	Pos./BA	10	572	10	573	10	609	10	609	0	0
	FTE/Obl.	10	564	10		10		10		0	
Total	Pos./BA	115	4,959	125	5,086	119	5,211	119	5,211	0	0
	FTE/Obl.	113	4,854	109		103		103		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	FTE	Amount
Government statistics											
Survey of government employment	FTE/Obl.										
Tax and intergovernmental revenue	FTE/Obl.										
Formula grant data	FTE/Obl.										
Federal reporting system	FTE/Obl.	20	$845	20	$870	20	$870	20	$870	0	0
Reimbursable obligations	FTE/Obl.	20	$845	20	$870	20	$870	20	$870	0	0

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Government statistics

Goals and Objectives

Goals:

The goals of Government Statistics are to provide current statistical information on state and local governments in the areas of public finance and employment; to collect tax and intergovernmental revenue data on state and local governments; to provide fiscal data elements used in aid distribution formulas; and to provide Federal expenditure data on a geographic basis.

Objectives:

The objectives of Government Statistics are to maintain and improve the accuracy of data produced and to ensure that the areas of governmental finance and employment are identified and met.

Base Program

Government finance survey. This survey provides annual estimates on government financial activity; quarterly statistics on Federal, state, and local government tax revenues; and quarterly statistics on the finances of selected public employee retirement systems. Annual financial statistics serve as updates of census year benchmark statistics and include data on revenue by sources, expenditures by function and object, indebtedness and debt transactions and financial assets.

These state and local government financial statistics provide the basis for many benchmarks and analyses. The Bureau of Economic Analysis estimates the state and local sector of the annual GNP accounts--about 13 percent of the total--from this information. The tax and intergovernmental revenue data base provides information to prepare analyses of fiscal policy, tax burdens and comparative studies on governmental finance. The detail by types of local government provides information on the relative activity of counties, municipalities, townships, special districts and school districts.

The Census Bureau publishes financial data on a fiscal year basis in the form of nationwide totals by level and type of government (including the Federal Government), and related state-by-state area aggregations subdivided into state government and type of local government (counties, municipalities, townships, special districts and school districts). The publications provide individual government statistics for states, county governments of 100,000 population or more, municipalities of 75,000 population or more, and school systems with enrollments of 15,000 or more.

Program output	Sample size	Universe
Annual government finance publications on Federal, state, and local governments	50 state governments and 22,000 local governments	83,200 government units

Data user	Use
Public officials; public interest groups; academic, financial, and business communities......	Economic research and appraisals of government finance activities.
Advisory Commission on Intergovernmental Relations..	Develop recommendations regarding the financing of state and local governments and their relationship with the Federal Government.
Bureau of Economic Analysis..........................	Update the annual government sector estimates of the GNP.
Federal Reserve Board................................	Develop data for the flow of funds reports and analysis of economic conditions.
Market analysts......................................	General measure of asset holdings and credit ratings for state and local governments.

Survey of government employment. This program provides the annual update of government employment and payroll data by type of government and function. These data provide the basic measures of public sector employment and payrolls for intercensal years. Basic data elements include full-time and part-time employees, full-time equivalent employment, October payrolls and full-time employee average earnings for the month of October. The Census Bureau provides state-by-state estimates for each type of government (Federal, state, county, municipal, township, school district and special district) and each level of employees, full-time equivalent employment, October payrolls and full-time employee average earnings for government (Federal, state and local) by governmental functions (e.g., education, police protection and fire protection). The survey is the only intercensal source of public employment and payroll data at this level of detail.

Program output	Sample size	Universe
Annual employment publications (3 reports)........	50 state governments and 22,000 local governments	83,200 governments

Data user	Use
Bureau of Labor Statistics.........................	Annual benchmark adjustments in its monthly statistical series on employment and earnings.
Department of Housing and Urban Development.......	Develop a public wage inflation factor for the allocation of their operational subsidy grants to local housing authorities.
Government legislators and administrators.........	Comparative data on a state area, substate area and/or individual government basis for decision-making and administrative purposes.
Bureau of Economic Analysis........................	Develop GNP statistics, GNP deflator indexes, national income and product accounts, and regional economic analyses.
Department of Agriculture..........................	Allocate administrative funds to states participating in the Special Supplemental Food Program for Women, Infants and Children.
Tax foundations and citizen interest groups.......	Monitor and analyze the efficiency of the public sector.

Tax and intergovernmental revenue. The Census Bureau collects tax data by the major categories of property, sales, income licenses and permits; and identifies intergovernmental receipts according to source of funds--Federal, State or local governments--and by the major purpose served. The specific purpose categories include education, public welfare, health and hospitals, streets and highways, housing and urban renewal, property tax relief programs and general support.

The Census Bureau obtains the data primarily through cooperative collection arrangements with State agencies which oversee, monitor or report on the financial operations of local governments in their states. Agreements exist between 36 states and the Census Bureau whereby the states conduct the initial survey and transmit the results to the Census Bureau. The States depend upon the Bureau's technical and professional support for assistance in these surveys. In the remaining States, or in cases where there are statistical gaps, the Census Bureau conducts a direct mail canvass.

Program output	Sample size	Universe
Annual government finance publications...........	All general purpose governments	39,000 counties, cities and towns, Federal and state governments.

Data user	Use
Federal and state agencies......................	Administer grant programs. Determine comparative tax effort burden of governments.

Formula grant data. Major products include the identification and classification of governmental entities, measurement of local government revenues, preparation of detailed computer data tapes, and verification of data elements used for fund distribution.

Program output	Universe
Classification of all governments by types. Identification of revenues by types and data element tapes for public use................	All 83,200 government units.

Data user	Use
Federal agencies, Congress, and state governments.	Administer aid distribution formulas and measure governmental fiscal capacity.

Federal reporting systems. The Federal Assistance Award Data System (FAADS) serves as the central source of information in the United States on all Federal domestic financial assistance programs. Information on each award includes the assistance program and amount funded, the Federal agency responsible for the program, type and name of recipient, and geographic location of the recipient (including the congressional district). The Census Bureau collects quarterly data in a standard, machine-readable format directly from Federal agencies administering the assistance programs. The FAADS program is required by Title 31, Section 6102(a) of the U.S. Code.

The Consolidated Federal Funds Report (CFFR) provides statistics on Federal Government expenditures or obligations in each state and territory, county and municipality. Coverage of the CFFR includes Federal salaries and wages, procurement, grants and direct payments for individuals, as well as Federal insurance and loan programs. The Census Bureau issues a series of three annual publications, each covering different levels of geographic detail (state, county and subcounty). The CFFR is required by Title 31, chapter 62 of the U.S. Code. The CFFR is the only central source of information on the geographic distribution of virtually all Federal spending.

Program output	Universe
Federal Assistance Award Data System (FAADS)..........	All Federal financial assistance awards listed in the Catalog of Federal Domestic Assistance (about 750 programs.) Includes grants, loans, insurance and direct payments.
Consolidated Federal Funds Report (CFFR)..............	85 percent of Federal budget outlays. Excluded outlays are principally interest on Federal debt and international transactions, i.e.,

Data user	Use
Congress...	Provide data on Federal Government role by state/district, program or spending category.
States...	Notification of Federal grant awards in conjunction with Executive Order 12372.
Office of Management and Budget (OMB).................	Meet requirements of 31 U.S. Code 6102(a), which requires OMB to maintain a grant award information system. outlays not allocated among the states.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	FTE	Amount
Agriculture statistics											
	Pos./BA	14	$398	14	$413	14	$414	0	0	(14)	($414)
	FTE/Obl.	14	408	14		14		0		(14)	
Total	Pos./BA	14	398	14	413	14	414	0	0	(14)	(414)
	FTE/Obl.	14	408	14		14		0		(14)	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current economic statistics programs
Subactivity: Agriculture statistics

Goals and Objectives

Goals:

The goals of Agricutlure Statistics are to provide current statistics on cotton production and ginning by state and county, and to meet current informaiton requirements for general census data on agriculture.

Objectives:

The objectives of Agriculture Statistics are to maintain and improve the quality of the data published and to ensure that the data are responsive to the needs of users.

Base Program

The Agriculture Statistics program provides the key measures of the cotton ginning industry on an annual basis as required by 13 U.S.C. 41-45. This title governs all data collected and published, including dates. The Census Bureau collects and publishes information on cotton ginning and production from all cotton gins in the United States during the ginning season.

Program output	Sample size	Universe
State bi-weekly cotton ginning report	N/A	1,645 gins
County/state monthly cotton ginning report	N/A	1,645 gins
Annual cotton ginnings in the U.S. report	N/A	1,645 gins

Data users	Use
Department of Agriculture:	
- National Agriculture Statistics Service	Estimate cotton production
- Agricultural Marketing Service	Determine cotton by grade
- Economic Research Service	Update cost of production data
National Cotton Council	Indicate and project cotton supply, demand and prices

Department of Commerce
Bureau of the Census
Salaries and Expenses
DECREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current economic statistics program
Subactivity: Agriculture statistics

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Agriculture statistics.......	Pos./BA	14	$414	0	$0	(14)	($414)
	FTE	14		0		(14)	

Agriculture statistics It has been decided to eliminate the low priority agriculture statistics on cotton ginning. Therefore, this subactivity has been eliminated. (-14 permanent positions, -14 FTE, and -$414,000).

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Current economic statistics programs
Subactivity: Agriculture statistics
Program Change: Eliminate cotton ginning reports

Object Class		1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	($230)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(230)
12.1	Civilian personnel Benefits	(42)
13	Benefits for former personnel	0
21	Travel and transportation of persons	(15)
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	(33)
23.3	Communications, utilities and miscellaneous charges	(24)
24	Printing and reproduction	(11)
25	Other services	(46)
26	Supplies and materials	(7)
31	Equipment	(6)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	(414)

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Demographic surveys											
Current population survey	Pos./BA	119	$6,450	120	$6,662	120	$7,088	135	$7,914	15	$826
	FTE/Obl.	215	6,158	199		199		209		10	
Methods development survey	Pos./BA	17	751	17	776	17	727	17	727	0	0
	FTE/Obl.	17	711	17		17		17		0	
Survey of income and program participation	Pos./BA	314	19,954	349	20,531	349	21,638	383	23,638	34	2,000
	FTE/Obl.	445	20,059	450		450		507		57	
Total	Pos./BA	450	27,155	486	27,969	486	29,453	535	32,279	49	2,826
	FTE/Obl.	677	26,928	666		666		733		67	

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Demographic surveys											
Current population survey	FTE/Obl.	440	$18,662	426	$18,297	426	$18,297	426	$18,297	0	0
Methods development survey	FTE/Obl.										
Survey of income and program participation	FTE/Obl.										
Reimbursable obligations	FTE/Obl.	440	$18,662	426	$18,297	426	$18,297	426	$18,297	0	0

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current demographic statistics programs
Subactivity: Demographic surveys

Goals and Objectives

Goals:

The goals of Demographic Surveys are to provide current information on the number, geographic distribution, social and economic characteristics of the population; and to test and implement new approaches and concepts for demographic surveys.

Objectives:

The objectives of this subactivity are to maintain and improve the quality and reliability of socioeconomic data; to maintain current activities which meet the needs of existing Federal programs, particularly state-level data; and to ensure the contained orientation of the demographic surveys toward national goals.

Base Program

Current population survey. The Census Bureau shares funding of the Current Population Survey program with the Bureau of Labor Statistics. The survey provides the official government estimates of employment, unemployment and related data on the characteristics of the labor force and persons not currently in the labor force. The Census Bureau funding supports the monthly collection of demographic data and the supplemental inquiries on income and education as well as the managerial responsibilities for the technical operations of the survey, including quality control maintenance.

In addition to the estimates related to the labor force, the Current Population Survey (CPS)--along with the Survey of Income and Program Participation (SIPP)--provides a major intercensal source of information on general socioeconomic characteristics of the U.S. population. For example, in March of each year, the

CPS serves as the vehicle for a major supplemental inquiry which produces the official estimates of personal and family income, number and type of families, and the number of families and persons living in poverty. This supplement also produces data showing migration trends between regions of the country, and metropolitan/non-metropolitan residences. The CPS also collects information on school enrollment, educational attainment, future birth expectations, and changes in the number of families and their composition. The Census Bureau obtains these data by adding supplemental questions to the survey at various times throughout the year and tabulates them by age, race, sex, Spanish origin, veteran status, and other demographic variables. Also, through supplemental inquiries, the CPS serves as the vehicle for collecting a wide range of data requested and paid by other Federal agencies.

The basic demographic data collected in the CPS are used in three principal ways: (1) internal analytical research; (2) evaluation of other survey results; and (3) use in association with data such as the monthly labor force or supplement publications. The data set which results from combining the monthly labor force data with the demographic data provides the ability to understand labor force patterns of many subpopulation groups.

The Census Bureau obtains monthly estimates which meet the Bureau of Labor Statistics standards of reliability for the country as a whole and the 11 largest states. The Census Bureau also produces annual estimates meeting specified reliability requirements for the 39 remaining states, District of Columbia, 30 large metropolitan statistical areas and 11 of their central cities. These data are among the most important U.S. indicators measuring the status and progression of the national economy on a current basis. Consequently, these indicators are key inputs to the decision-making process for national economic policy and the evaluations, forming the basis for the discontinuance, modification or creation of national economic programs. Sub-national data from the CPS are the basis for the distribution of Federal funding allocated each year to areas based on unemployment levels and rates.

During FY 1988, the Census Bureau completed the changeover of the CPS labor force computer processing system to a standard programming language. In FY 1989 we began using it to produce the monthly employment and unemployment estimates.

Program outputs	Sample size	Universe
Monthly and annual average tabulations of employment and unemployment data crossed by demographic characteristics.....	54,000 interviewed households per month	Approximately 87 million households
Annual report on income, poverty, fertility, migration, family status, school enrollment, educational attainments and other topics		

Data Users	Use
Bureau of Labor Statistics..............	Analyses and releases of official employment and unemployment in its monthly publication, "Employment and Earnings."
Council of Economic Advisers, Federal Reserve Board, Congress, Federal agencies, universities, and private organizations...	Analyze the status of U.S. economy and formulate/evaluate economic policy.

Methods development survey. This program provides a means to test and develop alternative survey methodologies and concepts needed to improve the quality and reliability of demographic surveys. Improvements derived from this program are applicable to the Current Population Survey (CPS), Survey of Income and Program Participation (SIPP) and other demographic surveys of national importance, including those providing statistical measures of crime, housing, health, consumer income and expenditures. Any enhancements to the Methods Development Survey will affect Federal programs which provide the statistics for funding allocations to state and local areas.

This program investigates all facets of survey operations, i.e., interviewing methods, response bias, quality control procedures and questionnaire design. The kinds of methodologies tested in the first phase of this program included telephone versus personal interviews, response differences between household members and interviewer conditioning. Having completed the testing of these different data collection procedures, the Census Bureau issued reports on the effect of these procedures. The earlier phases of the testing focused on the content recommendations made by the National Commission of Employment and Unemployment Statistics (NCEUS) for the CPS. Several of these recommendations have been incorporated into the CPS.

During FY 1988 and 1989, the Census Bureau completed the evaluation of Computer Assisted Telephone Interviewing (CATI) in the Current Population Survey and began introducing this data collection methodology into production use for this survey. We also began an evaluation program for Computer Assisted Personal Interviewing (CAPI), which will complement CATI in forming a completely automated data collection system. The combined use of CATI and CAPI will reduce or eliminate the costs for clerical editing, office handling, printing, and shipping of questionnaires, and will permit greater control over the interview situation. This will reduce interviewer errors and improve the quality of the data.

The Census Bureau will continue the field testing of CAPI in FY 1990. We will determine how interviewers and respondents react to the use of portable computers in the interview situation and what, if any, technical problems are associated with using computers in the field. Also, we will begin to develop an integrated communications/management system to control the flow of data and administrative information between headquarters, regional offices, and interviewers. The development of this system is critical for accurate handling of the numerous and complex surveys that the Census Bureau conducts. The development will continue into FY 1991. In mid FY 1991, we will introduce an elementary version of this communications system for use in testing a revised CPS questionnaire, and we will enhance this system as the year progresses.

Program outputs	Sample size	Universe
Census Bureau internal evaluation files and reports....................	Variable; average 1,000 households per month	Approximately 87 million households

Data users	Use
Census Bureau.........................	Development and evaluation of more accurate and efficient survey methodologies.

Survey of income and program participation. This survey satisfies the need for improved data on the economic situation of persons and families in the United States. Information covers sources of money and nonmoney income, taxes, and assets and liabilities to produce improved estimates of income distribution, poverty and wealth. The survey provides data to study the efficiency of Federal and state transfer and service programs; to estimate future program costs and coverage; and to assess the effects of welfare, tax, Social Security reform proposals and other proposed policy changes.

The survey was originally designed to introduce annual overlapping panels of 20,000 households with each household being interviewed every 4 months over 32-month period. A variety of budget reductions since FY 1985 have necessitated the introduction of smaller panels (11,500 households since 1985) that have a shorter duration (seven total interviews instead of eight beginning with the 1986 Panel). Because the data from these smaller panels caused analytical difficulties for data users, the Census Bureau began budget initiative actions starting in FY 1987 to increase the SIPP budget to allow a return to the original sample size and length. These actions have been unsuccessful. Consequently, the Census Bureau has taken an interim step to increase the size and usefulness of the 1990 Panel, introduced in FY 1990, by choosing one of the objectives of SIPP to fulfill now, while reducing the survey's ability to accomplish others

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(until additional funding is obtained). This plan included fielding an 18,000 household 1990 Panel and supplementing it with a special group of approximately 3,000 households from the 1989 Panel (a combined panel size of 21,000 households). To fund this restructuring, we discontinued data collection for the 1988 Panel after six interviews and the 1989 Panel households not retained for combination with the larger 1990 Panel, after three interviews (in January 1990).

Each household in this single, larger 1990 Panel is interviewed three times a year and is asked to recall a 4-month period. Interviews gather core data for all household members 15 years old and over. Information is collected on sources of money and nonmoney income, eligibility for and participation in various government transfer programs, labor force status, household composition, assets and liabilities, disability, work-related expenses, marital history, work history, childcare arrangements and expenses, pension coverage, and taxes. The survey permits the study of intrayear changes in income and poverty status and their relationships to participation in government programs, changes in household composition and other factors. The survey has flexibility to cover additional topics of interest to government policymakers.

Activities for FY 1991 will include conducting interviews for three waves of the 1990 Panel; keying data from the interviews; computer editing and reformatting data from the 1990 and earlier panels for analytical purposes; continuing project management and planning; data analysis; preparation of data products, including published reports and public use microdata files; research on data quality improvements and coordination with Federal agencies to ensure that the survey content is properly focused.

Program outputs	Sample size	Universe
Publications (i.e., sets of periodic or single-term reports).................	11,500 interviewed households from the earlier panels; 21,000 interviewed households from the 1990 Panel	Approximately 87 million households
Microdata public use files (Cross-sectional analysis files for each interview wave of each panel)...........................	11,500 interviewed households from the earlier panels; 21,000 interviewed households from the 1990 panel	

Data Users	**Use**
Congressional Budget Office and Congressional Research Service...........	To study the low income population, elderly population and health insurance coverage.
Department of Agriculture.................	To analyze the Food Stamp and School Lunch programs, including the effects of assets on food stamp eligibility
Department of Labor.......................	To study market-related hardship measures and changes in the labor force and dependency status through time
Social Security Administration............	To study social security beneficiaries by reason for benefits, levels of income, and demographic/economic characteristics such as assets holdings and pension coverage
National Center for Health Services Research........................	To examine the characteristics of the Medicare elderly who also have private health insurance
Small Business Administration.............	To study labor mobility by size of firm
Office of Child Support Enforcement.......	To determine the amounts of savings which can be realized if child support were included in the income test for AFDC, food stamps and Medicaid
Academic researchers.......................	To examine changes in family and household structure which occur over short periods of time and last for short durations. To research changes in school enrollment, geographic mobility, labor force participation, and marital status

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current demographic statistics programs
Subactivity: Demographic surveys

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Current population survey...	Pos./BA	120	$7,088	135	$7,914	15	$826
	FTE	199		209		10	

Modernization of current population survey (CPS) processing system (19 permanent positions, 14 FTE, and $926,000). The complete redesign and reprogramming of the CPS processing system is one of the highest priorities identified by the joint Census Bureau and Bureau of Labor Statistics conference on the Future of the CPS. Although the CPS employment and unemployment data are widely used in government and the private sector to analyze the U.S. economy, the processing system which produces these data is outmoded. Designed in the 1960's using then-current technology and techniques, the system does not produce the types of output, such as linked files and databases, which are conducive to the computerized analytical techniques currently being used. Specific shortcomings of the present system include (1) the difficulty of integrating the system with the Computer-Assisted Telephone Interviewing (CATI) techniques which the Census Bureau is introducing to improve data collection; (2) the reliance on clerical coding of occupation and industry data; and (3) the independent nature of processing data from each monthly survey despite the overlap in the monthly samples. The last factor confounds analysis of labor force dynamics through the use of flow data from the survey. The present system is also difficult to modify to accommodate changing data needs. It produces final data in formats which are unwieldy for analysts and unreliable for long-term storage.

The modernization of the CPS processing system will result in a process which is fully integrated from data collection through final data formats. After linking CATI and Computer-Assisted Personal Interviewing (CAPI) into an integrated system, the next step in this modernization will be the adaptation of the automated coding developed for the 1990 Decennial Census to reduce reliance on time-consuming, expensive and error prone clerical operations. While continuing to rely on mainframe computers for portions of the processing, the Census Bureau will integrate more efficient mini- and microcomputers into the new system wherever possible

Database technology will be used to permit positive control and monitoring of the processing flow, and will be a major factor in providing final data in formats which will facilitate the Bureau of Labor Statistics and private sector usage of the data. In addition, the Bureau will explore the use of advanced data storage media for the CPS, such as the Compact Disk - Read Only Memory, to improve the accessibility and reliability of data stored for long-term and historical uses; and investigate the feasibility of storing final data on centralized, off-line, minicomputers to provide direct access by users without the need to create redundant copies of large files.

The complete redesign of the Current Population Survey processing system will lead to greater efficiency and control in the production of monthly employment estimates, and provide key supplemental data on income and poverty. It will improve the reliability of data through the use of previously gathered information in edits and imputation, and should reduce the time required to produce the data. Finally, the new processing system will produce data products which are compatible with current technology and are in formats responsive to analyses.

Phase-out of Computer-Assisted Telephone Interviewing (CATI) (-4 permanent positions, -4 FTE, and -$100,000). This program decrease reflects the first phase-out of the Census Bureau's planned three-year funding associated with the introduction of CATI in the Current Population Survey.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current demographic statistics programs
Subactivity: Demographic surveys
Program Change: Modernize the CPS processing systems

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$455
11.3	Other than full-time permanent	2
11.5	Other personnel compensation	100
11.8	Special personnel services payments	0
11.9	Total personnel compensation	557
12.1	Civilian personnel Benefits	131
13	Benefits for former personnel	0
21	Travel and transportation of persons	15
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	69
23.3	Communications, utilities and miscellaneous charges	35
24	Printing and reproduction	13
25	Other services	69
26	Supplies and materials	15
31	Equipment	22
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	926

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current demographic statistics programs
Subactivity: Demographic surveys
Program Change: Modernize the CPS processing system

Title:		Grade	Number	Annual Salary	Total Salaries
Programmer		14	1	$52,104	$52,104
Statistician		13	2	44,092	88,184
Programmer		13	2	44,092	88,184
Statistician		12	3	37,079	111,237
Programmer		12	4	37,079	148,316
Statistician		11	3	30,937	92,811
Programmer		11	4	30,937	123,748
Total			19		704,584
Less lapse	35.43%		(5)		(249,634)
Total full-time permanent			14		454,950

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	14
Other than full-time permanent	0
Total	14
Authorized Positions:	
Full-time permanent	19
Other than full-time permanent	0
Total	19

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Current demographic ststistics programs
Subactivity: Demographic surveys
Program Change: Current Population Survey

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	($72)
11.3	Other than full-time permanent	(4)
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(76)
12.1	Civilian personnel Benefits	(19)
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	(5)
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	(100)

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct obligations in thousands)

Activity: Current demographic statistics
Subactivity: Demographic surveys

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Survey of income and program participation (SIPP)	Pos./BA	349	$21,638	383	$23,638	34	$2,000
	FTE	450		507		57	

Restoration of Survey of Income and Program Participation (SIPP) sample (34 permanent positions, 37 FTE and $2,000,000). The Survey of Income and Program Participation (SIPP) provides comprehensive information on the economic resources of the U.S. population and on how public transfers and tax programs affect their financial circumstances. The Survey's original sample design called for introducing a new sample panel of 20,000 households annually to produce survey estimates with only small biases. The sample restoration funded by this initiative will begin by introducing a new panel of 14,000 households in February 1991. This restoration process will build on the survey restructuring that was introduced in FY 1990. This restructuring involved the design and implementation of a single, larger 1990 Panel (21,000 interviewed households).

Congressional budget reductions and requirements for more staff than originally estimated to meet the processing and operational demands have resulted in significant sample reduction for SIPP in the 1984-1989 Panels. The sample size per panel since 1986 is 11,500 interviewed households; the optimal sample size is 20,000 households per panel. In addition, the Census Bureau has shortened the duration of the 1986-1987 Panels from of the 1986-1987 Panels from eight to seven interviews, the 1988 Panel to six interviews, and the 1989 Panel to three interviews.

Restoration of the full sample for SIPP estimates will produce longitudinal data, such as intrayear transitions into and out of poverty and the characteristics of persons and families who become eligible for government assistance programs or those who no longer are eligible due to changing economic circumstances. The reliability for these longitudinal estimates will improve by 20 percent as the result of the full sample restoration.

In addition, the sample restoration will also have a positive effect on cross-sectional variables. The Census Bureau will be able to detect changes that are 25 percent smaller in the survey's cross-sectional estimates with a full sample.

To meet the objectives of the SIPP, the survey must return to a design of larger overlapping panels. To begin this process, we will require additional and increasing funding over a 4-year period starting in FY 1991. Approximately $2 million will be needed in FY 1991 to introduce a new panel, starting in February 1991, of 14,000 households. In FY 1992, we will continue to interview the 1990 Panel and 1991 Panel households, and introduce a new panel of 20,000 households at an additional cost of $6.7 million. In FY 1993, we will complete interviewing for the 1991 Panel, continue to interview the 1992 Panel, and introduce the second panel of 20,000 households (1993 Panel) at the same level of funding, $6.7 million, as needed in FY 1992. Although we will be interviewing fewer households in FY 1993, we plan to use the additional funds for oversampling research in anticipation of the implementation of the 1990 Census sample redesign in 1995. In FY 1994, we will introduce the third panel of 20,000 households and interview a full complement of three overlapping survey panels, thus getting us back to the original design. The cost of this activity in FY 1994 and following years is an additional $1.7 million. This brings the full level of SIPP funding to $29.9 million. Any delay in this funding sequence will cause a commensurate delay in the survey's ability to achieve its intended objective.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct obligations in thousands)

Activity: Current demographic statistics programs
Subactivity: Demographic surveys
Program Change: Restore the SIPP Sample

	Object Class	1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$495
11.3	Other than full-time permanent	417
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	912
12.1	Civilian personnel Benefits	165
13	Benefits for former personnel	0
21	Travel and transportation of persons	240
22	Transportation of things	4
23.1	Rental payments to GSA	0
23.2	Rental payments to others	190
23.3	Communications, utilities and miscellaneous charges	110
24	Printing and reproduction	113
25	Other services	221
26	Supplies and materials	25
31	Equipment	20
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	2,000

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current demographic statistics
Subactivity: Demographic surveys
Program Change: Restore the SIPP Sample Size

Title:		Grade	Number	Annual Salary	Total Salaries
Supervisory computer programmer		13	1	$44,092	$44,092
Programmer		13	1	44,092	44,092
Statistician		12	1	37,079	37,079
Programmer		12	2	37,079	74,158
Mathematical statistician		11	2	33,372	66,744
Statistician		11	1	30,937	30,937
Programmer		11	2	30,937	61,874
Programmer		9	4	25,570	102,280
Computer operator		9	2	25,570	51,140
Computer operator		7	2	20,902	41,804
Computer operator		5	1	16,876	16,876
Secretary		5	1	18,564	18,564
Clerk		4	14	17,095	239,330
Total			34		828,970
Less lapse	40.29%		(11)		(333,992)
Total full-time permanent			23		494,978

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	23
Other than full-time permanent	34
Total	57
Authorized Positions:	
Full-time permanent	34
Other than full-time permanent	68
Total	102

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Demographic reports											
Population characteristics	Pos./BA	59	$1,700	71	$1,730	71	$1,842	72	$2,092	1	$250
	FTE/Obl.	42	1,699	42		42		43		1	
Population estimates and projections	Pos./BA	35	1,076	31	1,108	24	834	24	834	0	0
	FTE/Obl.	22	1,047	22		15		15		0	
Demographic analysis	Pos./BA	9	335	9	345	9	354	9	354	0	0
	FTE/Obl.	6	345	6		6		6		0	
Total	Pos./BA	103	3,111	111	3,183	104	3,030	105	3,280	1	250
	FTE/Obl.	70	3,091	70		63		64		1	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current demographic statistics programs
Subactivity: Demographic reports

Goals and Objectives

Goals:

The goals of Demographic Reports are to provide current information on the geographic distribution, and the demographic, social and economic characteristics of the U.S. population; to provide current estimates and projections of the U.S. population; and to develop and publish special analyses on demographic, social and economic trends in the United States.

Objectives:

The objectives of Demographic Reports are to publish recurring reports on the current estimates, demographic and socio-economic characteristics, and special projections of the population; to maintain programs which adequately meet Federal needs; to publish reports which will assist decision-makers in developing national policy; and to maintain or improve the quality, reliability and relevance of the data produced.

Base Program

Population characteristics. Reports based on information from the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), and other surveys provide the data essential for planning and evaluating public and private programs. These reports include special analyses and current statistics on a wide range of topical concerns. The Census Bureau presents data on race, age, sex, Hispanic origin, household, family and personal income (both money and non-money), employment and unemployment, occupation and industry, marital status, fertility, childcare arrangements, family and household living arrangements, educational attainment, characteristics of students and dropouts, voting, migration and residence (farm and nonfarm, metropolitan and nonmetropolitan, urban and rural).

The reports for these subject matter areas provide cross-classifications of characteristics for analytical purposes, and special analytical studies to profile the changes in American family and economic life.

In addition to the recurring reports, the Census Bureau recently published special studies on American families, non-cash benefits, child support and alimony, trends in childspacing, selected characteristics of travel to work in metropolitan areas, characteristics of the older population, geographic mobility of Americans, value of education, computer use, money income and poverty status of families and persons, household money income, household income after taxes, support for nonhousehold members, childcare, disability and health insurance coverage, and immigration to the United States.

The Census Bureau will continue work on statistical tables and analytical texts for publication in the Current Population Reports (CPS). These reports describe relevant demographic, economic and social characteristics of the U.S. population; and are usually published annually. The Census Bureau will also continue to collect and publish nationwide data projecting the number of persons of voting age, voter registration and participation for congressional elections and presidential election years.

Data users	Use
Departments of Justice, Housing and Urban Development, Health and Human Services, Education, Transportation, Veterans Administration, U.S. Civil Rights Commission Federal Elections Commission,.libraries, state and local governments, business and academic researchers, and the general public.	Determine the basic conditions of U.S human resources; measure changes in the economic, demographic, and social situation; and understand the current national situation in relation to income, education, employment, language proficiency, childcare, racial and ethnic groups, the aged and other areas.

Population estimates and projections. Reports provide regular estimates of the U.S. population by age, sex, race and Hispanic origin; population of states by age and sex, metropolitan areas, counties and subcounty areas; number of households by state and county; experimental estimates of the population of counties by age, race and sex; and estimates of population for Puerto Rico and the outlying areas.

The Census Bureau prepares projections on population and households for future years for the United States and the states by age, race and sex. The following data sources are used to prepare these estimates and projections: census population details, births, deaths, immigration, school enrollment, housing statistics, social security data, medicare data, Internal Revenue Service data, immigration-emigration data, and special supplements to the CPS.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Current demographic statistics programs
Subactivity: Demographic reports
Program Change: Metropolitan statistical area

Title:		Grade	Number	Annual Salary	Total Salaries
Statistician		13	1	$44,092	$44,092
Total			1		44,092
Less lapse	26.41%		0		(11,645)
Total full-time permanent			1		32,447

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	1
Other than full-time permanent	0
Total	1
Authorized Positions:	
Full-time permanent	1
Other than full-time permanent	0
Total	1

In addition, the Census Bureau provides assistance in the interpretation and use of these data. We are working with state agencies under the Federal-State Cooperative Programs for population estimates and for population projections to prepare (a) the county estimates by using standard procedures which ensure consistency with the state and national estimates, and (b) appropriate projection techniques.

Data Users	Use
Federal, state and local governments, media business and academic researchers, and the general public.	Determine the distribution of Federal program funds to local areas on the basis of population and planning purposes; identify changes in population size and distribution.

Demographic analysis. This program develops special microdata computer files for authoritative analyses of demographic, social and economic conditions and trends to foster effective use of recurring national surveys (the Survey of Income and Program Participation, the Current Population Survey, the American Housing Survey, and National Crime Survey) and the Censuses of Population and Housing. To the extent possible and warranted, we make the resulting microdata files and computer programs available for incorporation in the continuing programs of Federal statistical and program agencies.

During FY 1991, we will prepare and distribute analyses of demographic trends occurring in metropolitan and nonmetropolitan counties of varying economic specialization; prepare and release analyses of changing socio-economic characteristics of families and children using the Survey of Income and Program Participation, the Decennial Census, and the Current Population Survey; issue a number of "Statistical Briefs" on demographic and housing trends; and initiate development of comparable areal files from recent censuses for comparison with 1990 census data.

Data users	Use
Cabinet-level departments, Congressional committees, State and local officials, businesses, educators, media, researchers, librarians and general public..	Identify program-relevant changes in city population, households, families, and labor force as well as special interest sub-populations such as veterans.

Department of Commerce
Bureau of the Census
Salaries and Expenses
INCREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Current demographic statistics programs
Subactivity: Demographic reports

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Population characteristics...	Pos./BA	71	$1,842	72	$2,092	1	$250
	FTE	42		43		1	

Metropolitan statistical area (1 permanent position, 1 FTE, and $250,000) This increase provides for examination of basic metropolitan statistical areas (MSA) concepts in light of changing work patterns, population distribution, and available technology. We will fund contracts and/or a conference to identify and analyze alternative MSA concepts and develop associated statistical standards.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Current demographic ststistics programs
Subactivity: Demographic reports
Program Change: Metropolitan statistical area

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$32
11.3	Other than full-time permanent	5
11.5	Other personnel compensation	5
11.8	Special personnel services payments	0
11.9	Total personnel compensation	42
12.1	Civilian personnel Benefits	11
13	Benefits for former personnel	0
21	Travel and transportation of persons	22
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	7
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	11
25	Other services	150
26	Supplies and materials	6
31	Equipment	1
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	250

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
International statistics foreign research and analysis	Pos./BA	17	$673	18	$606	18	$733	18	$733	0	0
	FTE/Obl.	13	666	13		13		13		0	
Total	Pos./BA	17	673	18	606	18	733	18	733	0	0
	FTE/Obl.	13	666	13		13		13		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current demographic statistics programs
Subactivity: International statistics

Goals and Objectives

Goals:

The goal of International Statistics is to provide reliable estimates on the population, labor force and economic activity; their spatial distribution, analyses on aspects of demographic and economic policies and trends for various countries; and foreign technical assistance.

Objectives:

The objectives of International Statistics are to maintain up-to-date estimates and projections, to prepare monographs presenting results of research, to meet requests for information and assistance relating to these subject areas, and to provide technical assistance to overseas statistical programs. This program also provides library facilities, maintains the Census Bureau's publication exchange with foreign statistical offices, and conducts study tours for senior foreign dignitaries who produce and use these data.

Base Program

Foreign research and analysis. The outputs of International Statistics include economic information, and demographic estimates and projections of the population by age, sex, components of change, vital rates, gross reproduction rates, and expectation of life at birth for Communist countries. Data on selected countries cover characteristics of the population, population distribution, population policies and programs, economic statistics, input-output models, workforce characteristics, employment remuneration, and statistical systems. This subactivity contributes a working data source of statistical information to assess the capabilities and probable actions of foreign countries.

Given its source materials and expertise, the International Statistics subactivity also meets special requests for information and advice relating to problems, potentialities and prospects in population, labor force, economic development and policies of the Soviet Union, China and Eastern European countries.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Housing statistics	Pos./BA	15	$558	15	$577	15	$615	15	$615	0	0
	FTE/Oblg.	15	565	15		15		15		0	
Total	Pos./BA	15	558	15	577	15	615	15	615	0	0
	FTE/Oblg.	15	565	15		15		15		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Housing statistics											
	FTE/Obl.	255	$10,835	258	$11,053	258	$11,053	258	$11,053	0	0
Reimbursable obligations	FTE/Obl.	255	$10,835	258	$11,053	258	$11,053	258	$11,053	0	0

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Current demographic statistics programs
Subactivity: Housing statistics

Goals and Objectives

Goals:

The goal of Housing Statistics is to provide a measure on the types and levels of residential housing vacancies in the United States, both "inside and outside" metropolitan statistical areas by central cities and suburbs, and the four major geographic regions.

Objectives:

The objectives of Housing Statistics are to produce the quarterly rental and homeowner vacancy rate used to formulate the national quarterly economic indicators; to provide a quarterly measure of the types of housing in surplus and shortage, and the characteristics of available housing; to measure the level of homeownership; and to ensure that the collection and publication of data continue to be focused on the demand for housing and types of available housing.

Base Program

This program conducts the Housing Vacancy Survey which produces basic information on the current housing market. The vacancy rates for rental and homeowner units are produced on a quarterly and annual basis for the country as a whole, four major geographic regions, and "inside-outside" metropolitan areas by central cities and suburbs. The rental vacancy rate from the survey is a component of the index of leading economic indicators published by the Department of Commerce. Homeownership rates are produced quarterly and annually for the United States. The annual report also contains vacancy rates for selected metropolitan statistical areas. The quarterly reports include counts of the total housing inventory as well as data on selected characteristics of the vacant units, i.e., number of rooms, plumbing facilities, year built, duration of vacancy, monthly rent asked and sale price. Quarterly vacancy rates cover units with selected housing characteristics (number of rooms, plumbing facilities, year built, value and rent) for the rental and homeowner inventories. Data from the survey are vital to public and private organizations in evaluating housing markets and in determining the number and characteristics of units available for occupancy. The Census Bureau compiles the vacancy information from the supplemental Current Population Survey questionnaires.

Program Output	Sample Size	Universe
Four quarterly press releases, four quarterly reports, and one annual report.........................	70,000 housing unit sample of which approximately 11 percent are vacant.	All residential housing units within the 50 states and District of Columbia.

Data User	Use
Federal Reserve Board, Department of Housing and Urban Development, Bureau of Economic Analysis, and state and local government agencies..................	Measure types of housing available and levels of demand for housing in United States.
Home builders, mortgage companies and real estate agencies.......................	To determine the types of housing construction needed and the types in which surpluses exist.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Statistical abstracts and supplements	Pos./BA	31	$1,595	33	$1,683	33	$1,796	33	$1,796	0	0
	FTE/Oblg.	33	1,630	32		32		32		0	
Total	Pos./BA	31	1,595	33	1,683	33	1,796	33	1,796	0	0
	FTE/Oblg.	33	1,630	32		32		32		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Other programs and publications
Subactivity: Statistical abstracts and supplements

Goals and Objectives

Goals:

The goals of Statistical Abstracts and Supplements are to provide basic statistical reference volumes and guides to sources of statistics; to provide reports emphasizing ready accessibility to large amounts of statistical information and its sources with comprehensive subject matter coverage, compact formats and convenience in use; to provide reports meeting information needs at the national, state and regional levels; and to provide reports which facilitate and encourage the widespread use of the best data for decision-making at all levels.

Objectives:

The objectives of Statistical Abstracts and Supplements are to prepare and release the annual Statistical Abstract of the United States, annual Bureau of the Census Catalog and Guide, and Monthly Product Announcement; to plan and develop other statistical reference sources such as the State and Metropolitan Area Data Book, County and City Data Book, and Historical Statistics of the United States; and to prepare and release guides and directories to assist data users in accessing Census Bureau statistics.

Base Program

The Census Bureau has issued the Statistical Abstract of the United States annually since 1878, except in 1926 and 1944. The abstract provides a comprehensive summary of industrial, social, economic and political data. It serves as a statistical compendium and as a guide to other statistical publications and sources. It includes over 1,500 tables and charts drawn from data of over 200 government, private and international agencies. The Statistical Abstract is the principal source for annual statistics describing the social and economic structure of the United States. Highlights of statistics from the Abstract are available to data users through computer-based on-line retrieval services. An extension of the Abstract program includes planning and development of selected periodic supplements, including the County and City Data Book, and State and Metropolitan Area Data Book, and Historical Statistics of the United States. A recent survey defined the following users of the Statistical Abstract: congressional offices, administrators and planners at all levels of government; businesses; market analysts; researchers and educators; students; writers and librarians.

The Bureau of the Census Catalog and Guide is a complete guide to all Bureau programs, publications, special tabulations and computer-based files. It provides detail on content, periodicity and price for each report and file. This publication is the Census Bureau's official record of reports and activities. The Catalog/Guide keeps the public informed about the vast flow of census reports and the availability of data by way of the Bureau's computer files in a controlled and dependable manner. Portions of the Catalog/Guide are maintained on computer-based, on-line retrieval systems for access by users. The Census Bureau supplements the annual Catalog/Guide by the Monthly Product Announcement which lists all publications, computer tapes, microfiche and other products released during the previous month. In addition, the Census Bureau prepares and issues the Daily List [for Department of Commerce daily usage] which provides a daily inventory of every report, press release, data file, microfiche and map which it issues, and listing all reports transmitted to the printer with estimated release dates.

Data user	Use
Congressional staffs/research areas.................	Policy background and research information.
State/local government planners and officials.......	Research, economic development indicators, and input for state statistical publications.
Librarians..	Reference and research on national policy developments, conditions, and local trends.

Data User (cont'd)	Use
Private business and marketing staffs...............	Determine market areas, trends and local conditions; and to measure current and historical trends by industry or product.
Educators and students...............................	Research on national trends and lecture background material on uses and kinds of statistics.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
General research											
	Pos./BA	12	$690	13	$701	13	$749	13	$749	0	0
	FTE/Oblg.	13	645	13		13		13		0	
Total	Pos./BA	12	690	13	701	13	749	13	749	0	0
	FTE/Oblg.	13	645	13		13		13		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Other programs and publications
Subactivity: General research

Goals and Objectives

Goals:

The goals of General Research are to develop new or improved methods and procedures to conduct the Census Bureau's statistical operations and related activities; and as feasible, to provide theoretical foundations for such methods and foster their efficient implementation and automation.

Objectives:

The objective of General Research is to develop the Census Bureau's general research capability in time series analysis, survey design and estimation, and special experimental and evaluation studies.

Base Program

The General Research investigates problems where the solution is applicable to more than one program, or where an unified approach can be more effective than individual efforts by each program. These areas of study and application include sampling theory and design; time series analysis; and other aspects of the collection, processing or analysis of data which bear on the cost and usefulness of the resulting information. This continuing research effort allows scientific and technology developments, resulting in improved statistics and a higher level of responsiveness to data users.

For FY 1991, the Census Bureau will continue the development of time series methods to improve seasonal adjustment and demographic projections as well as economic and demographic survey estimates. It will also develop and refine small area estimation techniques for use in coverage evaluation of the decennial census and in augmentation of economic statistics, including county business patterns data.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Data systems development	Pos./BA	12	$666	13	$680	13	$592	13	$473	0	($119)
	FTE/Oblig.	13	687	13		13		13		0	
Total	Pos./BA	12	666	13	680	13	592	13	473	0	(119)
	FTE/Oblig.	13	687	13		13		13		0	

Department of Commerce
Bureau of the Census
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Other programs and publications
Subactivity: Data systems development

Goals and Objectives

Goals:

The goals of Data Systems Development are to identify, adapt, and promote the implementation of new and improved automated systems and advanced technologies that can satisfy the Census Bureau's unique processing requirements.

Objectives:

The objective of Data Systems Development is to undertake a program of applied research and development focusing on technological solutions to Bureau-wide processing problems. Centralized applied research facilitates the transfer of emerging technologies from the private sector and promotes the adoption of such technologies among the Census Bureau's statistical programs.

Base Program

The Data Systems Development program provides resources to identify, adapt, test and evaluate advanced hardware and software technologies that will improve the processing, timing, quality and usefulness of Census Bureau statistical programs. The applied research will focus on those technologies that offer the greatest potential benefits to major Census Bureau statistical programs. Among the technologies to be investigated and tested are:

--Improved methods of data capture for all censuses and surveys
--Document imaging technologies permitting the processing of electronic images
-Development of a centralized telecommunication control system
--Expanded use of expert systems and artificial intelligence
--Advanced database management software and hardware

For FY 1991 the Census Bureau will continue to test various methods of data capture using state-of-the-art technology, explore potential uses of optical imaging technology; contract with outside experts to better utilize artificial intelligence in census processing and begin development of an advanced telecommunication system. Projects will be selected and prototype technology will be procured to permit testing in a production environment.

Department of Commerce
Bureau of the Census
Salaries and Expenses
DECREASE FOR FY 1991
(Direct Obligations in thousands)

Activity: Other programs and publications
Subactivity: Data systems development

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Data systems development.......	Pos./BA	13	$592	13	$473	0	($119)
	FTE	13		13		0	

Data systems development Beginning in FY 1991, we will reduce the number of contracts to identify, adapt, test, and evaluate advanced technologies. Therefore, this line item has been reduced by $119,000.

Department of Commerce
Bureau of the Census
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Other programs and publications
Subactivity: Data systems development
Program Change: Reduce data systems development

Object Class		1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	($119)
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	(119)

Department of Commerce
Bureau of the Census
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Direct obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	$54,702	$58,539	$3,837
11.3	Other than full-time permanent	7,819	8,901	1,082
11.5	Other personnel compensation	618	796	178
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	63,139	68,236	5,097
12.1	Civilian personnel Benefits	12,572	13,786	1,214
13	Benefits for former personnel	48	48	0
21	Travel and transportation of persons	2,718	3,195	477
22	Transportation of things	162	167	5
23.1	Rental payments to GSA	7,676	7,676	0
23.2	Rental payments to others	55	840	785
23.3	Commun., util., misc. charges	3,315	3,680	365
24	Printing and reproduction	2,866	3,336	470
25	Other services	9,523	10,537	1,014
26	Supplies and materials	1,747	1,934	187
31	Equipment	1,434	1,798	364
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	105,255	115,233	9,978
	Reimbursable Obligations	96,000	96,000	0
	TOTAL OBLIGATIONS	201,255	211,233	9,978

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time permanent	1,885	2,025	140
Other than full-time permanent	364	437	73
Total	2,249	2,462	213
Authorized Positions:			
Full-time permanent	2,201	2,402	201
Other than full-time permanent	1,177	1,333	156
Total	3,378	3,735	357

Department of Commerce
Bureau of the Census
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1992 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	$72	$72	0
	Senior executive service	920	920	0
	General schedule	52,947	56,784	$3,837
	Commisssioned officers	0	0	0
	Wage board/wage marine	763	763	0
	Scientific & professional (P.L. 80-313)	0	0	0
	Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
	Examiners of trademark appeals (P.L. 98-622)	0	0	0
	Senior foreign service	0	0	0
	Foreign service staff	0	0	0
	Foreign service nationals	0	0	0
	Consultants & experts	0	0	0
	Students	0	0	0
	Subtotal	54,702	58,539	3,837
11.3	Other than full-time permanent			
	General schedule	5,595	6,577	982
	Wage board	236	236	0
	Experts & consultants	0	0	0
	Hourly	1,988	2,088	100
	Subtotal	7,819	8,901	1,082
11.5	Other personnel compensation			
	Overtime	283	368	85
	SES performance awards	160	204	44
	Cash awards	175	224	49
	Merit pay awards	0	0	0
	Other	0	0	0
	Subtotal	618	796	178
11.8	Special personnel services payments			
	Foreign service officers (State)	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
11.9	Total personnel compensation	63,139	68,236	5,097

Department of Commerce
Bureau of the Census
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits			
	Civil service retirement	$2,411	$2,398	($13)
	Federal employees' retirement	3,395	3,970	575
	Thrift savings plan	517	605	88
	Federal insurance contribution act	2,640	2,999	359
	Health insurance	2,860	3,056	196
	Life insurance	122	131	9
	Employees' compensation fund	566	566	0
	Other	61	61	0
	Subtotal	12,572	13,786	1,214
13	Benefits for former personnel			
	Severance pay	0	0	0
	Unemployment compensation	48	48	0
	Other	0	0	0
	Subtotal	48	48	0
21	Travel and transportation of persons			
	Common carrier	395	459	64
	Mileage	1,934	2,269	335
	Per diem/actual	380	455	75
	Vehicular	9	12	3
	Other	0	0	0
	[Overseas estimates]			
	Subtotal	2,718	3,195	477
22	Transportation of things	162	167	5
	[Overseas estimates]			
23.1	Rental payments to GSA	7,676	7,676	0
23.2	Rental payments to others	55	840	785
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	206	232	26
	Rental of office copying equipment	509	560	51
	Other equipment rental	75	80	5
	Telecommunications services	727	831	104
	Postal Service by USPS	1,790	1,971	173
	Other	0	6	6
	[Overseas estimates]			
	Subtotal	3,315	3,680	365

Department of Commerce
Bureau of the Census
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
24	Printing and reproduction			
	Publications	$1,070	$1,312	$242
	Public use forms	918	1,120	202
	Envelopes	38	46	8
	Other	840	858	18
	[Payments to GA, WCF]			
	[Overseas estimates]			
	Subtotal	2,866	3,336	470
25	Other services			
	Training:			
	University	102	113	11
	Office of personnel management	83	92	9
	Other	230	256	26
	Maintenance of equipment	849	945	96
	GSA reimbursable services	727	809	82
	ADP services	0	0	0
	Telecommunications services	0	0	0
	Payments to GA, WCF	1,999	1,999	0
	Other non-government contracts	4,489	4,966	477
	Other	1,044	1,357	313
	[Overseas estimates]			
	Subtotal	9,523	10,537	1,014
26	Supplies and materials			
	Office supplies	950	1,060	110
	ADP supplies	681	758	77
	Other	116	116	0
	[Overseas estimates]			
	Subtotal	1,747	1,934	187
31	Equipment			
	Office machines and equipment	694	865	171
	ADP hardware	740	923	183
	ADP software	0	2	2
	Other	0	8	8
	[Overseas estimates]			
	Subtotal	1,434	1,798	364

Department of Commerce
Bureau of the Census
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	$105,255	$115,233	$9,978
	Reimbursable Obligations	96,000	96,000	
	TOTAL OBLIGATIONS	201,255	211,233	9,978

Department of Commerce
Bureau of the Census

AVERAGE GRADE AND SALARY

	FY 1989	FY 1990	FY 1991
Average ES salary	$75,978	$78,371	$95,656
Average GS grade	7.82	7.82	7.82
Average GS salary	23,305	24,175	25,021

Department of Commerce
Bureau of the Census

Salaries and Expenses
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Consulting services........................	$147	$139	$137
Management and professional services......	262	150	141
Special studies and analyses..............	...	24	225
Management and support services for research and development..............	...	...	...
TOTAL..................................	$409	$313	$503

The principal uses for advisory and assistance services in the salaries and expenses appropriation are to make the data collected by the Census Bureau more useful to the user community.

Advisory and assistance services were procured for the Survey of Income and Program Participation (SIPP), to acquire computer programming and related services to expand the amount of data available for research and evaluation from SIPP.

In the foreign trade program, advisory and assistance services will be procured to evaluate the present system of compiling statistics on foreign trade, and recommending improvements.

On a smaller scale, advisory and assistance services are also procured to obtain skills unavailable in the Bureau for our international research program, and for a variety of specialized topics in our current demographic surveys programs.

Department of Commerce
Bureau of the Census

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	FY 1988 Actual	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Periodicals....................	$ 372	$ 337	$ 354	$ 371
Pamphlets......................	2,165	4,804	4,200	3,200
Audiovisuals...................	64	43	40	38
Total......................	$ 2,601	$ 5,184	$ 4,594	3,609

Periodicals: Included in these figures are Census and You, Monthly Product Announcement, Bureau of the Census Catalog, and Statistical Abstract of the United States. The minor decreases reflect improvements in production automation.

Pamphlets: This category includes all statistical publications other than periodicals, comprising monthly, quarterly, annual, and irregular statistical reports. The increase for FY 1989 reflects full production of reports for the 1987 Economic, Agriculture and Governments Censuses (EAGC), as well as moderate inflation in salaries, expenses, and printing costs. The estimate for FY 1990 reflects continued production of EAGC reports, and the estimate for FY 1991 reflects initial production of 1990 Decennial Census reports.

Audiovisuals: This category includes both in-house and contracted costs for producing artwork and photographic slides and transparencies for presentations. The decreases reflect reduced audiovisual activity for the 1987 EAGC and the 1990 Decennial Census, as well as moderate inflation in salaries, expenses, and costs of photographic materials.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990	Pos./BA			3,560	$1,322,967
		FTE/Obl.			54,807	1,414,513
	Sequester applied, 1990	Pos./BA			(16)	(8,131)
		FTE/Obl.			(357)	(8,131)
	Appropriation currently available, 1990	Pos./BA			3,544	1,314,836
		FTE/Obl.			54,450	1,406,382
	Planned cyclical changes in periodic censuses	Pos./BA			622	(1,011,198)
		FTE/Obl.			(47,778)	(1,102,744)
CEN-163	FY 1991 Adjustments to base:					
	Adjustment for 1990 pay increase and related costs	Pos./BA	0	7,044		
		FTE/Obl.	0	7,044		
	Other costs changes	Pos./BA	0	4,675		
		FTE/Obl.	10	4,675		
	Subtotal, adjustments to base	Pos./BA			0	11,719
		FTE/Obl.			10	11,719
	1991 Base	Pos./BA			4,166	315,357
		FTE/Obl.			6,682	315,357

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Economic statistics programs:											
CEN-169	Economic censuses	Pos./BA	382	$24,610	404	$15,596	299	$17,249	299	$17,249	0	0
		FTE/Obl.	396	22,643	300	17,661	234		234		0	
CEN-175	Census of governments	Pos./BA	28	1,599	33	1,866	62	1,645	62	1,645	0	0
		FTE/Obl.	26	1,482	29	1,983	44		44		0	
CEN-179	Census of agriculture	Pos./BA	226	10,361	218	8,582	200	10,859	200	10,859	0	0
		FTE/Obl.	229	13,833	205	9,122	142		142		0	
	Subtotal	Pos./BA	636	36,570	655	26,044	561	29,753	561	29,753	0	0
		FTE/Obl.	651	37,958	534	28,766	420		420		0	

	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Demographic statistics programs:											
CEN 183	Intercensal demographic estimates	Pos./BA	53	$2,612	63	$3,335	60	$3,457	60	$3,457	0	0
		FTE/Obl.	49	2,554	58	3,394	62		62		0	
CEN 187	Decennial census	Pos./BA	2,959	451,360	2,562	1,238,770	3,288	245,789	3,288	245,789	0	0
		FTE/Obl.	9,701	381,240	53,647	1,312,237	5,955		5,955		0	
CEN 199	2000 Decennial census	Pos./BA	0	0	0	0	12	784	23	1,531	11	$747
		FTE/Obl.	0	0	0	0	13		21		8	
	Subtotal	Pos./BA	3,012	453,972	2,625	1,242,105	3,360	250,030	3,371	250,777	11	747
		FTE/Obl.	9,750	383,794	53,705	1,315,631	6,030		6,038		8	
CEN 207	Sample redesign	Pos./BA	20	775	46	1,887	84	4,728	84	4,728	0	0
		FTE/Obl.	16	764	52	1,901	88		88		0	
CEN 209	Geographic support	Pos./BA	123	9,624	218	8,504	161	8,294	161	8,294	0	0
		FTE/Obl.	164	8,987	159	9,419	144		144		0	
CEN 213	Data processing systems	Pos./BA	0	58,375	0	36,296	0	22,552	0	22,552	0	0
		FTE/Obl.	0	44,527	0	50,665	0		0		0	
	Direct Obligations	Pos./BA	3,791	559,316	3,544	1,314,836	4,166	315,357	4,177	316,104	11	747
		FTE/Obl.	10,581	476,030	54,450	1,406,382	6,682		6,690		8	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 President's Budget	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$476,030	$1,406,382	$315,357	$316,104	$747
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Trust funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries	(8,259)	0	0	0	0
Unobligated balance, start of year	0	(91,546)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	91,545	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Reimbursable sequester	0	0	0	0	0
Budget Authority	559,316	1,314,836	315,357	316,104	747
Transferred to /from other accounts	0	0	0	0	0
Reappropriation	(42,012)	0	0	0	0
Sequester	0	8,131	0	0	0
Appropriation	517,304	1,322,967	315,357	316,104	747

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part I - 1990 Structure
(Dollar amounts in thousands)

Activity/Subactivity	1991 Direct Obligations	Proposed Changes
Economic statistics programs	$29,753	
Economic Censuses	17,249	No change
Census of Governments	1,645	No change
Census of Agriculture	10,859	No change
Demographic statistics programs	250,777	
Intercensal demographic estimates	3,457	No change
Decennial Census	247,320	Establish new subactivity for the 2000 Decennial Census.
Sample redesign	4,728	No change
Geographic support	8,294	No change
Data processing systems	22,552	No change
Total requirements	316,104	

Department of Commerce
Bureau of the Census
ACTIVITY/SUBACTIVITY CHANGE CROSSWALK
Part 2 - 1991 Structure
(Obligations in thousands)

	Amounts				
Activity/Subactivity	1987	1988	1989	1990	1991
Economic statistics programs:	$29,875	$66,759	$37,958	$28,766	$29,753
Economic censuses	13,341	32,373	22,643	17,661	17,249
Census of governments	5,037	2,936	1,482	1,983	1,645
Census of agriculture	11,497	31,450	13,833	9,122	10,859
Demographic statistics programs:	76,128	199,877	383,794	1,315,631	250,777
Intercensal demographic estimates	2,756	2,697	2,554	3,394	3,457
Decennial census	73,372	197,180	381,240	1,312,237	245,789
2000 Decennial census	0	0	0	0	1,531
Sample redesign	582	844	764	1,901	4,728
Geographic support	16,279	8,490	8,987	9,419	8,294
Data processing systems	48,263	43,507	44,527	50,665	22,552
Total direct obligations	171,127	319,477	476,030	1,406,382	316,104

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Perm Pos	Amount
ADJUSTMENTS:		
Adjustments for FY 1990 pay increase and related costs in 1991:		
Amount in FY 1991 to provide full-year cost of pay increase		7,044
Less amount absorbed		0
Total, adjustment for 1990 pay increase	0	7,044
Adjustment for FY 1991 pay increase and related costs in 1991:		
Amount in FY 1991 to provide cost of pay increase		5,244
Less amount absorbed		(2,622)
	0	2,622
ESTIMATED COST CHANGES:		
Employees compensation	0	53
Cyclical requirements	0	1,700
Management savings (A-76)	10	300
Subtotal, other increases	10	2,053
Total	10	11,719

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Direct Obligations in thousands)

	Perm Pos.	Amount
Adjustment for 1990 pay increase and related costs:		
Total cost in 1990 of pay increase	0	$10,179
Less amount absorbed	0	(10,179)
Anticipated 1990 pay increase supplemental	0	0
Amount in 1991 to provide full-year cost of pay increase	0	7,044
Less amount absorbed	0	0
Subtotal, adjustment for 1990 pay increase	0	7,044

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, Census is absorbing the full cost of this pay increase.

	Perm Pos.	Amount
Adjustment for 1991 pay increases and related costs:		
Total cost in 1991 of general pay increase	0	5,034
Less amount absorbed	0	(2,517)
Subtotal, adjustment for 1991 general pay increase	0	2,517
Total cost in 1991 of SES pay increase	0	210
Less amount absorbed	0	(105)
Subtotal, adjustment for 1991 SES increase	0	105
Total adjustment for 1991 pay increases	0	2,622
Estimated Cost Changes:		
Management Savings	0	300

This amount represents the adjustment to the FY 1991 planning level for A-76 restoration.

Employees' Compensation Fund.. 0 53

The increase in the repayment related to the Employees' Compensation Fund is the result of higher costs in the year ending June 30, 1989 than in the year ending June 30, 1988. The 1989 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in FY 1991 pursuant to 5 USC 8147.

District office pay... 0 226

This represents the increase in district office pay due to the new administrative pay rates determined by the geographic location of the office.

Travel and transportation of persons.. 0 99

Travel costs related to updating previous censuses were increased by 2.68 percent for inflation based on the table of implicit price deflators for U.S. Government purchases of goods and services from the Survey of Current Business.

Increase..................................	200
Amount absorbed.........................	(101)
Total updating..........................	99

Transportation of things... 0 24

Transportation costs related to updating previous censuses were increased for inflation by applying the inflation rate of 2.68 percent from the table of implicit price deflators.

Increase..................................	48
Amount absorbed.........................	(24)
Total updating..........................	24

Rents, Communications, Utilities, and miscellaneous charges.................. 0 503

The costs of rents, postage and other communications and utilities related to updating previous censuses were increased for inflation by applying the inflation rate of 2.68 percent from the table of implicit price deflators.

Increase..................................	943
Amount absorbed.........................	(440)
Total updating..........................	503

Printing and reproduction..		0	434

Printing costs related to updating previous censuses were increased for inflation by applying the inflation rate of 7 percent from the table of implicit price deflators.

Increase................................	878
Amount absorbed.........................	(444)
Total updating..........................	434

Other Services..		0	248

The cost of other services related to updating previous censuses was increased for inflation by applying the inflation rate of 2.68 percent from the table of implicit price deflators.

Increase................................	505
Amount absorbed.........................	(257)
Total updating..........................	248

Supplies and materials..		0	109

The cost of supplies and materials related to updating previous censuses was increased for inflation by applying an inflation rate of 1.91 percent from the table of implicit price deflators.

Increase................................	221
Amount absorbed.........................	(112)
Total updating..........................	109

Equipment..		0	57

The cost of equipment related to updating previous censuses was increased for inflation by applying an inflation rate of 1.91 percent from the table of implicit price deflators.

Increase................................	115
Amount absorbed.........................	(58)
Total updating..........................	57

Department of Commerce
Bureau of the Census

Periodic Censuses and Programs
Appropriation Language and Code Citations:

1. For expenses necessary to collect and publish statistics for periodic censuses and programs provided for by law,

13 U.S.C. 4, 6, 12, 131, 141, 142, 161, 181, 191;
15 U.S.C. 1516; 42 U.S.C. 1973 aa-5.

13 U.S.C. 4 authorizes the Secretary to "perform the functions and duties imposed upon him by this title" or he may delegate any of them "to such officers and employees of the Department of Commerce as he may designate."

13 U.S.C. 6 provides that "The Secretary...may call upon any other ... establishment of the Federal Government...for information pertinent to the work provided for in this title." This section also provides that "The Secretary may acquire, by purchase or otherwise, from States, counties, cities, or other units of government,..., or from private persons and agencies such copies of records, reports, and other material as may be required for the efficient and economical conduct of the censuses and surveys provided for in this title."

13 U.S.C. 12 provides that "The Secretary is authorized to have conducted mechanical and electronic development work as he determines is needed to further the functions and duties of carrying out the purposes of this title and may enter into such developmental contracts as he may determine to be in the best interest of the Government.

13 U.S.C. 131 provides that "The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses, including the distributive trades, service establishments, and transportation (exclusive of means of transportation for which statistics are required by law to be filled with, and are compiled and published by a designated regulatory body), in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof."

13 U.S.C. 141 provides that "The Secretary shall, in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April of such year, which date shall be known as the decennial census date, in such form and content as he may

determine, including the use of sampling procedures and special surveys."

13 U.S.C. 142 provides that "The Secretary shall in 1979, in 1983, and every fifth year beginning after 1983, take a census of agriculture."

13 U.S.C. 161 provides that "The Secretary shall take, compile and publish for the year 1957 and for every fifth year thereafter a census of governments."

13 U.S.C. 181 provides that "The Secretary...shall annually produce and publish for each State, county and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and, to the extent feasible, shall biennially produce and publish for other local units of general purpose government current data on total population."

13 U.S.C. 191 provides that "Each of the censuses authorized by this chapter shall include each State, the District of Columbia, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States exercises jurisdiction, control or sovereignty."

15 U.S.C. 1516 provides that "The Secretary of Commerce shall have control of the work of gathering and distributing statistical information naturally relating to the subjects confided to his department... He shall also have the authority to call upon other departments of the Government for statistical data and results obtained by them; and he may collate, arrange, and publish such statistical information so obtained in such manner as to him may seem wise."

42 U.S.C. 1973 aa-5 directs that "The Director of the Census...conduct a survey to compile registration and voting statistics: (i) in every State or political subdivision with respect to which the prohibitions of section 1973b(a) of (42 U.S.C.) are in effect, for every statewide general election for Members of the United States House of Representatives after January 1, 1974; and (ii) in every State or political subdivision for any election designated by the United States Commission on Civil Rights."

2. $316,104,000 to remain available until expended:

No Specific Authority

This phrase provides for extended obligation authority which would be restricted to the current fiscal year by 31 U.S.C. 1301.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Economic censuses											
Census of business	Pos./BA	238	$12,038	192	$7,616	165	$9,898	165	$9,898	0	0
	FTE/Oblg.	247	10,872	147	8,604	131		131		0	
Census of construction	Pos./BA	40	2,741	47	1,889	29	2,222	29	2,222	0	0
	FTE/Oblg.	41	2,465	36	2,087	30		30		0	
Census of manufactures and mineral industries	Pos./BA	86	8,575	146	5,423	96	4,443	96	4,443	0	0
	FTE/Oblg.	90	7,853	105	6,200	64		64		0	
Transportation characteristics program	Pos./BA	18	1,256	19	668	9	686	9	686	0	0
	FTE/Oblg.	18	1,453	12	770	9		9		0	
Total	Pos./BA	382	24,610	404	15,596	299	17,249	299	17,249	0	0
	FTE/Oblg.	396	22,643	300	17,661	234		234		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic statistics programs
Subactivity: Economic censuses

Goals and Objectives

Goals:

The goals of the Economic Censuses are to provide comprehensive statistics on the level of U.S. economic activity and the characteristics of industrial and business establishments at the country, state and local levels and outlying areas.

Objectives:

The objectives of the Economic Censuses are to initiate planning and improvements in the methodologies used in the collection, processing and publication of the economic censuses; to plan data content; to enhance programs designed to minimize respondent burden and provide respondent assistance; and to ensure the quality of data collected in the censuses.

Base Program

Title 13 U.S.C. 131 requires the censuses of manufactures, mineral industries, construction industries, retail and wholesale trade, service industries, transportation and other businesses every five years covering the years ending in 2 and 7. The results of these censuses are summarized and presented for various classification such as kind-of business, geographic location (state, county, metropolitan statistical areas, city and place), sales size, employment size, legal form of organization and degree of specialization.

The economic censuses represent the primary source of facts about the structure and function of the U.S. economy, providing essential information to government and business. These censuses furnish an important part of the framework for composite measures such as the gross national product and input-output analyses. In forecasting and planning, it is especially useful to analyze the national product in terms of the elements which determine its size and composition. The economic censuses make this possible by providing weights and benchmarks for indexes of industrial production, productivity and prices. The censuses also furnish benchmarks and sampling lists for the Census Bureau's current economic programs. Business enterprises, trade associations, banks, investors, research groups, educational institutions and unions use data from the censuses for the purposes of planning expansion programs, selecting locations for new establishments, forecasting sales trends, determining market potential, checking sales and advertising performance, and performing other analyses. The information is also used to revise the Standard Industrial Classification (SIC) system.

The 1992 Economic Censuses will include about 13 million establishments engaged in mining, manufacturing, construction, retail, wholesale, selected services and transportation operations. The Census Bureau minimizes respondent burden by sending questionnaires to less than 33 percent of these establishments. Administrative records were used to obtain information from the remaining establishment which included the smaller businesses.

The 1992 Enterprise Statistics program will regroup census data for establishments under common ownership or control to show the economic characteristics of the owning or controlling firm.

The 1992 Economic Censuses of Outlying Areas will encompass Puerto Rico, Virgin Islands, Guam and Northern Mariana Islands. In these areas, the Census Bureau will collect data on retail trade, wholesale trade, selected service industries, construction industries, and manufactures (but not minerals and transportation). The mail canvass will be supplemented by personal interviews in Puerto Rico and the Virgin Islands; elsewhere, the enumerators will visit each establishment.

Fiscal year 1991 is the second year in the six year cycle of the 1992 Economic Censuses. This is a critical year in the funding cycle because planning and preparatory activities will establish the scope, coverage, content and methodologies that will be employed in the collection, processing, and publication of the censuses. Planning activities cross all line items.

Planning and preparatory activities are especially important because of the expanded census scope. For the first time, the 1992 Economic Censuses will collect and publish data for the finance, insurance, and real estate sectors; public utilities; communications; and those transportation industries not covered in the 1987 censuses. During FY 1991, the Census Bureau will complete the analysis of a small scale pilot survey of these industries and use this information to refine inquiries and instructions. After extensive contacts with data users and data suppliers, final decisions will be made concerning census content and forms design and the forms clearance process will begin. During FY 1991 the basic processing methodology will be determined and work will begin on the acquisition of required hardware and the development of processing specifications and software. Continued emphasis will be placed on identifying new technologies that can improve the timeliness and accuracy of census results.

The Census Bureau proposes to reallocate funding from FY 1994 to FY 1991 and FY 1992 for the 1992 Economic Censuses. This resource shift will devote additional resources to vital planning activities. Changing and emerging data requirements, combined with significant changes in corporate structure and recordkeeping practices demand that we devote more resources to 1992 census planning relative to prior censuses. New information requests have to be thoroughly evaluated with special attention given to the availability of data in company records. New, improved, and less burdensome data collection methods must be investigated and tested. All of these activities require earlier and more intensive contacts with companies. In addition, the long lead times associated with procurements of advanced processing technologies needed to further automate census processing also require that funds be available earlier in the processing cycle than in previous censuses. This funding shift will significantly improve census planning and processing without increasing the total cost of the 1992 Economic Censuses.

A brief discussion of each census follows:

Census of business. This includes the censuses of retail trade, transportation, wholesale trade and service industries. The Census of Retail Trade includes establishments engaged in selling merchandise to the public for personal or household consumption and services rendered incidental to the sale of those goods. The Census of Wholesale Trade includes establishments primarily engaged in selling merchandise to retailers and repair shops; to industrial, commercial, institutional, professional or agricultural users; or to other wholesalers. The latter also includes establishments acting as agents or brokers. The Census of Service Industries includes selected establishments engaged primarily in providing a variety of services for individuals, businesses and government establishment. As the first phase of the service sector expansion, the Census Bureau added 22 of 50 transportation service industries to the 1987 Census of Transportation. The expanded scope of the 1992 Economic Censuses will add the missing transportation industries as well as cover finance, insurance, real estate, communication and public utilities.

Census of construction. This census enumerates establishments engaged as general contractors, operative builders, special trade contractors, land subdividers and developers. Construction includes new work, additions, alterations, maintenance and repair.

Census of manufactures and mineral industries. The Census of Manufactures covers establishments engaged in the mechanical or chemical transformation of materials or substances into new products. The Census of Mineral Industries enumerates establishments engaged in the extraction of minerals including solids such as coal and ores, liquids such as crude petroleum, and gases such as natural gas.

Transportation characteristics program. For FY 1991, this program includes the Truck Inventory and Use Survey which provides the characteristics and operational uses of truck resources. It is based on a sample of private and commercial trucks from a universe of 35 million registrations. The Census Bureau collects and publishes establishment-based transportation statistics as part of the Census of Business.

The following programs are related to several of the individual economic censuses:

-- The Survey of Minority-Owned Business Enterprises determines the extent of business ownership by specific minority groups in the United States, i.e. Blacks, persons of Spanish origin, Asian Americans, American Indians and other minorities.

-- The Women-Owned Businesses program includes economic data on firms owned by women. The Census Bureau publishes information on the number of firms, employees, payroll and receipts.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Census of governments											
Planning, direction, and review	Pos./BA	1	$306	1	$57	1	$47	1	$47	0	0
	FTE/Oblg.	1	56	1	57	1		1		0	
Government finance	Pos./BA	23	1,037	8	292	36	344	36	344	0	0
	FTE/Oblg.	21	1,240	8	359	25		25		0	
Public employment	Pos./BA	4	256	3	161	3	165	3	165	0	0
	FTE/Oblg.	4	175	3	211	2		2		0	
Governmental organization	Pos./BA	0	0	4	164	4	174	4	174	0	0
	FTE/Oblg.	0	2	4	164	3		3		0	
Taxable property values	Pos./BA	0	0	17	1,192	18	915	18	915	0	0
	FTE/Oblg.	0	9	13	1,192	13		13		0	
Total	Pos./BA	28	1,599	33	1,866	62	1,645	62	1,645	0	0
	FTE/Oblg.	26	1,482	29	1,983	44		44		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic statistics programs
Subactivity: Census of governments

Goals and Objectives

Goals:

The goal of the Census of Governments is to provide benchmark figures in the areas of public finance and public employment; local government organization; powers and activities; state and local fiscal relationships; and property tax administration and related subjects.

Objectives:

The objectives of the Census of Governments are to identify the most pressing data needs in the areas of public finance, public employment, local governments and tax administration; and to develop procedures and arrangements which will gather and present the data in the most efficient and useful way.

Base Program

Title 13 U.S.C. 161 requires the Census of Governments on a quinquennial basis. Title 13 requires "each such census shall include, but not be limited to, data on taxes and tax valuations, governmental receipts, expenditures, indebtedness, and employees of states, counties, cities and other governmental units."

The Census Bureau has conducted the Census of Governments, as currently structured, every five years since 1957. The census is the only source of comprehensive and uniformly classified data on the activities of state and local governments. Findings from the Census of Governments are used by:

- --Congress and Federal agencies in planning and appraising programs involving intergovernmental relationships, Federal revenue and debt policies, and distribution of selected Federal grant-in-aid programs;
- --State legislative and executive agencies, local government officials and civic groups to compare financing, employment levels, and pay and operations among geographic areas and to improve equity in property tax administration;
- --Financial and business firms concerned with municipal security ratings and relative levels of taxation and expenditure in particular areas; and
- --Economic research agencies, textbook writers and educators to describe the nature, scale and trends of governmental activities in the United States.

The Census of Governments consists of four principal parts: government finance, public employment, government organization, and taxable property values. The Census Bureau collects most census information by mail from 83,200 local government units, but some units provide data on magnetic tapes and computer printouts. We conduct the field enumeration to gather the data needed for the Taxable Property Values Survey and to follow-up on non-respondents and difficult cases for other surveys.

The FY 1991 budget provides for further planning of the content, collection and processing of data for the government finance, public employment, governmental organization and taxable property value phases of the 1992 Census of Governments.

- --Planning, direction and review. Funds provide an evaluation of the 1987 and 1992 censuses. It involves a complete review of the tabular presentation of the 1987 census results, with the view toward improving the clarity and utility of the 1992 data.
- --Government finance. This census phase includes the following activities: discussing table specifications with Publication Services Division; reviewing computer specifications for all tables; initiating the correcting or rewriting of computer specifications both for tables and processing; submitting forms for OMB approval; and reviewing and initiating all joint collection arrangements with state governments.

--Public employment. Activities include preparing final recommendations for 1992 census survey content and procedures; preparing survey instruments; preparing the request for OMB approval; identifying and contacting possible central data sources; and beginning preliminary computer programming.

--Governmental organization. This activity continues planning operations directed toward the governmental organization phase of the census. It focuses on legislative research; prelist canvass of special districts; file updating; questionnaire design, clearance and printing; and mailout preparation.

--Taxable property values. Funds provide for: continuing work on electronic data collection in approximately 750 assessment jurisdictions; preparing field enumeration training materials and survey processing procedures; writing and testing computer programs; selecting the 1992 jurisdiction sample; conducting legal research; and canvassing of state agencies to obtain certain aggregate assessment data needed to benchmark 1992 census results.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Census of agriculture											
Planning, direction, and review	Pos./BA	113	$5,424	148	$5,346	137	$6,167	137	$6,167	0	0
	FTE/Oblg.	110	5,392	135	5,346	93		93		0	
Census test	Pos./BA	0	0	0	200	0	236	0	236	0	0
	FTE/Oblg.	0	0	0	200	0		0		0	
Data collection	Pos./BA	0	55	2	69	7	1,080	7	1,080	0	0
	FTE/Oblg.	0	73	3	89	6		6		0	
Data processing	Pos./BA	81	3,406	55	2,454	55	2,609	55	2,609	0	0
	FTE/Oblg.	85	5,038	53	2,494	40		40		0	
Publications	Pos./BA	8	207	1	189	0	0	0	0	0	0
	FTE/Oblg.	9	667	2	189	0		0		0	
Sampling, statistical standards, and evaluation	Pos./BA	16	418	1	178	1	629	1	629	0	0
	FTE/Oblg.	17	195	3	203	3		3		0	
Other censuses and surveys	Pos./BA	8	851	11	146	0	58	0	58	0	0
	FTE/Oblg.	8	2,468	9	601	0		0		0	
Total	Pos./BA	226	10,361	218	8,582	200	10,859	200	10,859	0	0
	FTE/Oblg.	229	13,833	205	9,172	142		142		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic statistics programs
Subactivity: Census of agriculture

Goals and Objectives

Goals:

The goals of the Census of Agriculture are to provide relevant, comprehensive statistical information on the agricultural sector of the U.S. economy at the national, state and county levels; to provide descriptive data on farm enterprises; to provide data on selected agricultural subjects for the years following the census at the national, state and regional levels; and to provide data on irrigation at the national, state and district levels.

Objectives:

The objectives of the Census of Agriculture are to maintain and improve the relevance, quality and timeliness of information collected; to provide improved comparability of economic data from the agricultural sector with data from the other economic sectors; and to improve the accessibility of data for national and other geographic area analyses of the agricultural sector.

Base Program

Title 13 U.S.C. 142 requires the Census of Agriculture for years ending in 2 and 7, and the Census of Irrigation at ten year intervals for years ending in 7.

The Census of Agriculture provides statistical measures of the agricultural sector of the U.S. economy at the national, state and county levels. The basic information consists of the number of farms, farm acreage, operating expenditures, value of farmland, land use, statistics on crops and livestock, equipment, government loan and farm program participation, and farm practices, i.e., the use of pesticides, fertilizers, and irrigation. The Census of Agriculture is the only source of consistent, comprehensive national agriculture industry data for all states and counties.

The census provides agricultural data for a wide spectrum of users. For example, the Administration and Congress use the data to formulate and evaluate national farm programs. The Department of Agriculture uses the data to determine changes in the agriculture sector, to benchmark current data series and recurring and special sample surveys, and to prepare the farm sector accounts. The Bureau of Economic Analysis uses the data to prepare national economic accounts as well as statistics on regional income data. The Departments of Agriculture and Interior, state and local governments and others use on-farm irrigation data to evaluate water resource requirements and to develop national and local policies on agricultural water use and water reclamation projects. The Soil Conservation Service uses the data in providing appraisals of trends, status and conditions in irrigation as required by the Food Security Act of 1985. Agencies such as the Farm Credit Administration use production, sales and expenditures data to formulate and evaluate farmer loan and other credit programs for the agriculture sector. Local areas use census data to evaluate the need for farm support facilities such as equipment and farm suppliers, grain elevators and other marketing activities, and to develop programs which provide incentives to preserve agricultural lands. Farm associations use the data for planning programs for their membership. Agencies such as the Animal Plant and Health Inspection Service, Extension Service and Agriculture Stabilization and Conservation Service use the data to allocate resources to specific counties and to implement their programs. Federal programs allocate billions of dollars of funds annually based on census information.

FY 1991 is the second year in the six-year funding cycle of the 1992 Census of Agriculture. The funds support the continuation of the extensive review and evaluation with Federal and state agencies and other Census of Agriculture data users to determine the scope, content, definitions and classifications for the 1992 census. Evaluation, installation and testing of new processing equipment and procedures also will be underway, as well as developing the census mail list. The Census Bureau will continue planning for the five-year censuses of Puerto Rico, Guam, Northern Mariana Islands, and the Virgin Islands with review and consultation with the respective governments and data users on the content and procedures for the 1992 Census of Agriculture.

Planning, direction and review. This activity provides funds for the professional, technical and support staff required for conducting and evaluating the tests; determining collection and processing methodologies; and preparing specifications, procedures, and computer programs for the 1992 census. This includes introducing new technologies to the census processing. Identification of user publication needs, and analysis of the publication tables and electronic methods for data release will continue.

Census test. The funds provide for conducting the 1991 test of final content and methods.

Data collection. The Census Bureau will begin developing the collection requirements and specifications, developing the forms, and determining and obtaining Postal Service clearance of mailing packages. The funds also provide for beginning the preparation of the census mail list including obtaining source lists, preparing procedures and specifications and computer programs.

Data processing. Processing requirements will be determined, and specifications, procedures, and program preparation begun. Necessary equipment acquisition and installations will also be underway.

Sampling, statistical standards and evaluation. The Census Bureau will begin developing the specifications for the sample design, and weighting and reliability methodologies for the 1992 Census of Agriculture. Also, we will prepare the plans for the nonresponse survey and work with the U.S. Department of Agriculture (USDA) on the June Enumerative Survey as a coverage evaluation sample. The Census Bureau also will begin development of specifications for the edits and imputation, and disclosure avoidance methodology.

Other censuses and surveys. For the 1992 census, the Census Bureau will continue planning with governmental representatives and data users from Puerto Rico, Guam, the Virgin Islands, and the Northern Mariana Islands. In addition, we will determine scope and content and collection methodologies for these censuses.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Intercensal demographic estimates	Pos./BA	53	$2,612	63	$3,335	60	$3,457	60	$3,457	0	0
	FTE/Oblig.	49	2,554	58	3,394	62		62		0	
Total	Pos./BA	53	2,612	63	3,335	60	3,457	60	3,457	0	0
	FTE/Oblig.	49	2,554	58	3,394	62		62		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Demographic statistics programs
Subactivity: Intercensal demographic estimates

Goals and Objectives

Goals:

The goals of Intercensal Demographic Estimates are to develop and prepare updated population and per capita income estimates for general purpose governmental units; and to develop and prepare a variety of data to meet diverse legislative needs.

Objectives:

The objectives of this subactivity are to provide updated population and per capita income estimates; to investigate and resolve all data challenges resulting from the use of these estimates; to provide a potential methodological framework as a basis for responding to data requests arising from the use of these estimates; and to provide data for local government and private industry use.

Base Program

Many Federal programs provide benefits to state, county and local units of government through the use of distribution formulas. The importance of population and income data in these formulas requires the development and use of current data. The Congress formalized this requirement in 1976 with the enactment of P.L. 94-521, requiring the Census Bureau to produce annual population estimates for units of general purpose government. The public law specifies the use of such estimates by Federal agencies in the administration of Federal program benefits to state, county or local units of government when the population is used to determine the amount of benefits.

Administrative records already collected by the Federal Government (such as income tax returns, Medicare enrollment records, and vital statistics) are a primary source of information for the intercensal estimates. For example, the individual income tax returns are geographically coded and used to develop migration statistics. The current geographic coding process uses methods and data prepared in 1980. In FY 1991, we will develop more currently accurate and dynamic methods and data to geographic code the administrative records, incorporating selected data included in the TIGER geographic coding files. These data, when combined with other geographic information, make it possible to provide current estimates for states, counties and local governmental units eligible to participate in Federal benefit programs. In terms of reliability, the population estimation system using administrative records yields results which compare favorably with estimates prepared by other methods for states and counties. Current estimates for local governmental units provide geographic detail and a level of accuracy in line with the quality level recommended or proposed for figures required for legislative purposes. The Census Bureau is using the findings of evaluation studies to further improve the estimates.

The Census Bureau will research and resolve all data challenges resulting from the use of the estimates by Federal agencies. The review process involves checking for clerical and logical errors on input data including births, deaths, institutional population, military station strength and barrack population, and migration data. It also reviews any supporting data supplied by the challenging government. If necessary, the Census Bureau will ask its local contacts--developed through the Federal State Cooperative Program for Population Estimates--for comments and any new data available on the challenging area's current population. A review, challenge and appeal process has been instituted within the Census Bureau whereby local areas can bring their challenges, both informally and formally, before submitting them to a hearing examiner.

Beyond the use on the distribution of Federal funds, the estimates for the geographic distribution of population provide the data needed to make decisions such as the location of retail outlets and manufacturing establishments, state and local government services, planning of utility service, and redefining metropolitan areas.

During FY 1991, the Census Bureau will evaluate the estimation methods used during the 1980's for states and substate areas by preparing population estimates for 1990 and comparing them against the counts from the 1990 census. Results from this "test of methods" will be used to select the estimation techniques to be used throughout the 1990's. The Census Bureau will continue to resolve challenges relating to the estimates; and prepare migration flow tabulations. The estimates and migration data will be sent to the appropriate Federal agencies for their use.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Decennial Census											
Planning, direction and review	Pos./BA	253	$12,699	291	$14,058	269	$13,309	269	$13,309	0	0
	FTE/Oblg.	213	12,736	285	14,058	251		251		0	
Test censuses and dress rehearsal	Pos./BA	55	2,141	0	0	0	0	0	0	0	0
	FTE/Oblg.	37	1,836	0	0	0		0		0	
Data Collection	Pos./BA	227	89,759	411	975,601	175	27,461	175	27,461	0	0
	FTE/Oblg.	1,130	76,312	44,859	1,031,795	537		537		0	
Operations	Pos./BA	1,173	275,783	1,125	189,692	1,886	140,376	1,886	140,376	0	0
	FTE/Oblg.	7,551	197,711	6,895	200,595	3,566		3,566		0	
Product development and data dissemination	Pos./BA	235	81,422	295	12,491	359	23,309	359	23,309	0	0
	FTE/Oblg.	165	55,911	270	13,383	284		284		0	
Promotion and outreach	Pos./BA	78	28,592	81	19,259	37	5,269	37	5,269	0	0
	FTE/Oblg.	413	27,315	468	24,346	84		84		0	
Statistical research and evaluation	Pos./BA	917	9,987	337	26,471	481	32,367	481	32,367	0	0
	FTE/Oblg.	179	8,406	850	26,862	1,119		1,119		0	
Residential finance survey	Pos./BA	9	227	8	450	81	3,618	81	3,618	0	0
	FTE/Oblg.	9	276	9	450	114		114		0	
21st Century planning staff	Pos./BA	12	750	14	748	0	0	0	0	0	0
	FTE/Oblg.	4	787	11	748	0		0		0	
Total	Pos./BA	2,959	451,360	2,562	1,238,770	3,288	245,789	3,288	245.789	0	0
	FTE/Oblg.	9,701	381,740	53,647	1,317,237	5,955		5,955		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Demographic statistics programs
Subactivity: Decennial census

Goals and Objectives

Goals:

The goals of the Decennial Census are to provide official population counts mandated for apportionment of the U.S. House of Representatives and redrawing state legislative districts; and to provide comprehensive and accurate population and housing statistics to meet national, state, and local data needs for the 1990's. The census will provide data for political and statistical areas: the Nation as a whole, states, counties, places, census tracts, and blocks.

Specifically, the program goals of the 1990 Decennial Census are to:

-- Meet all legal deadlines for providing reapportionment data to the President and the Congress by December 31, 1990, and redistricting data to the states by April 1, 1991;
-- Expedite the availability of the data to users;
-- Maintain a high rate of overall coverage, improve the accuracy of small area data, and reduce the undercount differential for population groups and geographic areas;
-- Maintain the confidentiality of the census results; and
-- Strike an appropriate balance between the length of the questionnaires and data needs.

Objectives:

The objectives of the Decennial Census in FY 1991 are to complete data collection activities such as post-census local review; to deliver apportionment counts to the President and redistricting data to the states; to begin release of data products containing information based on census questions asked of everyone; to complete coding of written responses to questions asked of only a sample; to begin creating the file containing detail from the sample questionnaire; and to produce results from evaluations of census coverage.

Base Program

Title 13 U.S.C. 141 authorizes the conduct of the Decennial Census for the apportionment of congressional representation. For the 1990 census, the Census Bureau will enumerate the total population and housing units in the 50 states, District of Columbia, Puerto Rico, and the Outlying Areas, including the Virgin Islands, Guam, the Northern Mariana Islands, Palau, and American Samoa. The census produces valuable data on changes in population and housing for thousands of political and statistical areas. The census collects social and economic characteristics such as age, sex, race, ethnic origin, education, unemployment, occupation, and income; and housing characteristics such as tenure (occupancy of unit by owner or renter), rental costs and value of property.

The Congress relies on census information for apportionment purposes as well as formulating and planning public policy. Most states use census data to redraw legislative boundaries. State and local governments, businesses, educational institutions, and individuals use decennial data for decisions affecting nearly every aspect of American life. For example, government agencies use census data to develop transportation policy, plans, and programs, and to fund highway construction and public transit systems. Education data provide educational attainment levels and identify local needs for academic, vocational, and bilingual education programs.

Federal agencies use census data to fulfill their legislative requirements and census data provide the basis for allocating billions of Federal assistance dollars. Specifically, the Housing and Community Development Acts of 1968 and 1974 and the Housing and Urban Development Act of 1970 require housing data for the allocation of funds; demographic and social characteristics fulfill requirements in other areas, such as under the Voting Rights Act, the Older Americans Act of 1965 (as amended), the Adult Education Act, the Civil Rights Acts of 1957 and 1964 (as amended), and the Equal Employment Opportunity Act of 1972.

Timely and accurate data improve the quality of the decisions and allocations of funds. The requirement to maintain and improve the quality and timeliness of data to meet these needs was a priority in the Census Bureau's 1990 planning process.

Another major element in the Census Bureau's planning process was to test, evaluate, and improve all major census operations to ensure quality, timeliness, and control. The objectives of the tests were to overcome problems of control, processing, and coverage encountered in 1980 and to prepare for the 1990 census workloads associated with growth in housing units and population since 1980.

A major, unprecedented advancement over the 1980 census design has been the increased use of automation. Two major improvements that will help us publish accurate and timely data are the computer-based address control file and the automated Management Information System. The address control file contains a complete housing unit inventory necessary to ensure the inclusion of each household in the census. It will allow us to follow-up promptly on households that did not mail back their questionnaires and to process data concurrently with the field data collection operation. The operational timing of the 1990 census is extremely tight and critical if the Census Bureau is to meet the mandated dates for delivering the apportionment counts to the President and redistricting data to the states, and to provide timely census data products. The Management Information System will be used to track the costs and progress of thousands of interrelated census activities throughout the census cycle, improving accuracy, effective decision-making and use of resources. These innovations will help us to produce accurate 1990 census data in a timely manner.

Highlights of Cyclical Changes

The FY 1991 base request of 5,955 FTE and $245,789,000 represents a decrease of 47,692 FTE and $992,981,000 from the FY 1990 levels. The decrease in resources reflects the transition from the highly labor-intensive field operations conducted in FY 1990 to processing, tabulation and publication of data in FY 1991. While budget resources decrease significantly, the FY 1991 program is important because it is the year that we achieve our goals for delivering apportionment counts to the President and redistricting data to the states. FY 1991 is the first year that the official results of the 1990 census enumeration will be available to the public. We begin release of the 1990 census data products whose quality and timeliness depend on the success of the preparatory and census operations that preceded them.

In early FY 1991, we will complete the local review program which allows local officials to review and identify problems with the 1990 census counts. This is the last data collection operation after which we will close the final set of district offices. Also, we will complete data capture operations and begin creating the data files that form the basis for all publications that will be released. The need for adequate resources in FY 1991 is critical, because delays could jeopardize our ability to meet our mandated deadlines and to ensure timely release of data products.

The following describes the FY 1991 activities for the Decennial Census:

Planning, direction, and review. This provides for the administration, coordination, and control of all aspects of the census. The automated Management Information System (MIS) enables Census Bureau managers to track the cost and progress of each major census operation throughout the year. In FY 1991, all major data capture, tabulation and publication activities will be monitored via this system. The MIS is providing better and more timely information that enhances the Census Bureau's ability to manage the multiple complex operations of the census.

Data Collection. This provides the implementation and management of data collection operations, including the 13 regional census centers' direction and control of all field activities. These regional offices managed the 1990 census enumeration activities, for which we hired nearly 500,000 temporary employees and opened 496 local district offices. Most of these temporary employees are released and most district offices closed during FY 1990 after completing peak operations to follow-up households that did not return their questionnaires.

The 109 master district offices will remain open through October 1990 to conduct the post-census local review program. The local review program provides local officials with the opportunity to participate in the census process. The Census Bureau encourages these local officials to use their knowledge of the community to identify potential problems in the coverage and geographic allocation of housing units. Local officials will review preliminary 1990 census data and the district offices will canvass those areas identified as having potential coverage problems. We will enumerate any housing unit that had been missed. We will also correct our address list and the delineation of political boundaries based on this review.

These district offices will close after completing the local review canvass, and dispose of or return supplies, furniture and equipment to headquarters or to stock. The regional census centers will continue to resolve the payroll, personnel, and operational problems that may occur with employing and releasing several hundred thousand temporary census workers. The regional census centers also will help resolve outstanding problems with political boundaries identified during the local review program, and provide direction and control of geography, research and evaluation and outreach programs described under the applicable budget line item.

Operations. The 1990 data processing plan represents a marked improvement over 1980 processing. The network of seven processing offices will have processed the questionnaires concurrently with data collection. This change allows the Census Bureau to detect and correct errors on the questionnaires while the field offices are still open, and to accelerate delivery of census data products to users. In FY 1991, all processing offices will remain open, and will employ up to 8,000 workers to complete data capture activities, including FACT 90 capture of questionnaires, keying of written responses from the sample questionnaire, and clerical resolution of automated coding operations.

Coding of written responses from the sample questionnaire involves three types of information and three automated systems, newly designed for 1990, to support processing of this data--general coding; industry and occupation coding; and place-of-work, place-of-birth and migration coding. For general coding of items such as ancestry, race and the like, codes will be automatically assigned using computer systems at headquarters. Those items that cannot be coded by the computer (representing unique responses) will be resolved by subject-matter experts and entered into the data file. We complete coding of the industry and occupation responses on the sample questionnaire for each person in the labor force. We will automatically assign industry and occupation codes to an estimated 28 million persons. Those responses that cannot be automatically coded will be resolved through computer-assisted clerical operation in a processing office. Place-of-work, place-of-birth and migration coding is budgeted and described with other geographic activities under the operations line item.

During FY 1991, analysts at headquarters will review selected census data for completeness and accuracy, consulting with the field and processing offices to resolve problems and inserting corrections in the computer files. This process will conclude in FY 1991 with clearance of the data capture files for the tabulation/publication processes and with certification of each states' population counts for calculation of apportionment.

The Census Bureau will complete the process to edit/impute and apply confidentiality edit procedures to the data from questions asked of everyone, or 100-percent data. The result of this process is the computer file (edited detail file) that allows us to produce 100-percent data tabulations. Similar work for the data from the sample questionnaire will begin in FY 1991. This process will include weighting the sample data so that specified characteristics in specified geographic areas are comparable with 100-percent counts.

In 1991, our Baltimore, Maryland Beta Test Center and National Support Center (NSC) will continue to provide support to the decentralized computer sites for the regional census centers, district offices and processing offices. The Beta Test Center has the ability to replicate the hardware and software configuration of any office and will improve the Census Bureau's ability to isolate the cause of specific system problems and resolve them. The NSC will provide a 'Hot Line' service to resolve problems in the decentralized processing operations or referral to headquarters staff. The NSC will continue to control the release of software to the computer sites for processing and geographic operations.

The Census Bureau started planning earlier for the Censuses of Puerto Rico and Outlying Areas, which includes the Virgin Islands and the Pacific Areas (Guam, the Northern Mariana Islands, and American Samoa) and has been working closely with the local officials to solicit their advice and determine their 1990 census data needs. (If the United States and Palau do not enter into a Compact of Free Association, the Census Bureau will also take a census in Palau.) The Census Bureau will have conducted the 1990 Census of Puerto Rico using list/enumerate procedures. The questionnaires were similar in content to the stateside questionnaires, with some changes to reflect unique socioeconomic, cultural, and climatological characteristics. Questionnaires, and field and processing materials were translated into Spanish. For the censuses of the Virgin Islands and the Pacific areas, the Census Bureau hired and trained advisors to assist these governments in taking their censuses.

In FY 1991, we will complete all data capture activities, including coding the written responses from the sample questionnaire, such as place-of-birth of parents and industry and occupation data. We will prepare and deliver the redistricting data and maps for Puerto Rico by June 1991. We will begin the preparation of data products for Puerto Rico, Virgin Islands, American Samoa, Guam, the Northern Mariana Islands and Palau. The tabulation and publication programs for Puerto Rico and the Virgin Islands will parallel the stateside program and will be complete at the end of FY 1993. The program for the Pacific Areas contains similar data but fewer products and will be complete at the end of FY 1992. The early planning and close working relationship with these areas will allow the Census Bureau to meet the data needs for these areas in a timely manner.

The Census Bureau, in cooperation with the U.S. Geological Survey, developed the Topologically Integrated Geographic Encoding and Referencing (TIGER) system to provide geographic support for the decennial census (and other programs) from a single, automated source. TIGER contains all geographic information needed to conduct field operations, tabulate and publish data, and will create the maps needed to support these activities.

The Census Bureau will conduct activities related to the update and use of the TIGER system for the 1990 census. Specifically, the Census Bureau will:

-- Complete the resolution of 1990 political boundary problems, including American Indian reservations and trust lands; these problems were identified and researched through the local review program;

-- Complete the definition of the statistical and administrative areas required for tabulating census data;

-- Complete software development for the production of publication maps from the TIGER file. We will also use the software to begin producing publication maps, for example, the county block, subdivision and census tract maps;

-- Update the reference files for coding place-of-work responses from the sample questionnaire, by working with local planning organizations to update employer name and location information; and

-- Continue to update the TIGER file to reflect new streets or to correct errors identified by enumerators or by local officials involved in census programs such as post census local review.

Another major FY 1991 activity is to code the place-of-work/migration/place-of-birth responses from the sample questionnaire. Place-of-work, place-of-birth and migration coding identifies the location of employment places, state or foreign country of birth, and place of residence 5 years ago, respectively. Place-of-work data identify the location of places of employment and are fundamental to state-wide, regional, urban transportation planning programs and are required for defining metropolitan areas. Migration data on the movement and distribution of the population are integral to understanding the impact of population movements on labor markets and the demand for services in states and local areas. Place-of-birth data are used to enforce the requirements of the Voting Rights Act and the Civil Rights Act of 1964 (as amended), as well as in bilingual education programs, immigration and refugee resettlement programs and in analysis of coverage of the census.

Product Development and Data Dissemination. To determine the design of the 1990 census tabulation and publication program, the contents of the data products and their dissemination media, the Census Bureau consulted with a wide range of data users, including the Congress, State and local governments (including American Indian and Alaska Native governments), businesses and marketers, national and local organizations and groups, researchers, academicians, librarians, and other interested groups.

We used formal and informal vehicles for obtaining recommendations from data users, such as through: 1) 65 Local Public Meetings held in major cities and/or state capitals; 2) 10 Regional Data Products Planning Meetings; 3) a National Conference on Data Products; 4) other conferences or meetings, professional organizations, and census advisory committees; and 5) ongoing communications with users in correspondence and so forth. The process included an examination of current and emerging legislation that could affect the requirements for census information, evaluations of tabulations and publications released from previous censuses, and a evaluation of new dissemination media such as Compact Disk-Read Only Memory (CD-ROM) and on-line information systems. The Census Bureau disseminated the proposed content of data products to data users for review and comment, and finalized them after review of their recommendations.

The design of the 1990 tabulation and publication program is similar in geographic coverage and content to the 1980 census. We will produce data products earlier, and in many cases, will issue the products in a different sequence and in additional formats.

Although the traditional dissemination media forms--printed reports and computer tapes--will provide the largest amount of 1990 census data to users, newer types of media will be used on a limited basis after we release the data products via printed reports and tapes. We will implement an on-line system to provide up-to-date information about the availability of data products and to carry selected 1990 data. A limited number of data products will be released on CD-ROM. Also, some products will be issued on microfiche but fewer than 1980.

In FY 1991, we will prepare and deliver the apportionment counts to the President by December 31, 1990. Participation by the states in the redistricting program for state legislatures (Public Law 94-171), has increased substantially, more than double the number for the 1980 census. In FY 1991 we will prepare and deliver the congressional redistricting data and maps to each State and the District of Columbia by April 1, 1991, as required in the legislation.

In addition, we will begin to prepare and disseminate the printed reports and computer summary tape files based on the census questions asked of everyone. Maps will be prepared to accompany these data products. These products are prepared for each State, the District of Columbia, and a United States Summary. Information in these early products will be shown for States, counties, places, minor civil divisions, American Indian and Alaska Native Areas, block groups, and so forth. Concurrently, work will be done on other standard, or general use, data products (based on questions asked of everyone as well as only a sample) that will be disseminated in FY 1992.

We will continue developmental work, such as preparing procedures, software and training materials, for the special tabulation and user defined areas programs. As in the past, we anticipate numerous requests for data that will not be available from our standard products. They require tabulations from census data files and will be produced on a user fee basis. Special tabulations are requested by a wide variety of users, including Federal agencies who have unique data needs for the allocation of funds, program planning and evaluation.

Promotion and outreach. The promotion and outreach efforts are designed to encourage public cooperation in the census. The Census Bureau fosters cooperation through its contacts with national organizations, census advisory committees, community-based organizations, and local leaders. In FY 1991, the outreach and promotion program will help inform the public of the results of the census, and introduce the public to the 1990 data products that resulted from the census. Most importantly, we will inform and assist the public in accessing and using the variety of 1990 data products at the national and local levels. Also, we will complete the Thank-you America Campaign to acknowledge those outside the Census Bureau who provided support.

Statistical research and evaluation. The research and evaluation programs will provide measures of error in census characteristics data and the sources of these errors. These programs can be characterized generally by three major areas of study: content, coverage, and procedures and processing.

Content programs will assess the quality of data from the 1990 census, provide information about the sources and magnitude of nonsampling errors introduced during data collection and processing, and will assess the effect of sampling, nonsampling, coverage, and geographic errors on data use.

Coverage programs encompass the post enumeration survey and demographic analysis to measure the undercount and develop subnational coverage measurements by different population characteristics. In FY 1991, we will complete data collection and processing activities for the post enumeration survey and conduct demographic analysis. We will evaluate the housing unit coverage of the census by housing characteristics, enumeration methodology and geography. Also, we will evaluate the effectiveness of coverage improvement programs and will identify where coverage deficiencies remain as well as evaluate the quality of our coverage evaluation techniques.

Procedures and processing programs will examine the new and expanded techniques used for the 1990 census. We will concentrate on the major innovations implemented for the first time in the 1990 census, specifically, automated, decentralized data processing; automated edit, coding and control procedures; and the automated geographic system. We will also evaluate the effect of the 1990 outreach and promotion efforts. We will determine if the new techniques were cost effective and whether they produced the desired results.

Residential finance survey. The Census Bureau has conducted the Residential Finance Survey (RFS) every ten years since 1950 as part of the Decennial Census of Housing. The RFS produces data on the financing of non-farm, privately-owned residential properties. The RFS is unique in several respects. Unlike other demographic surveys where the unit of reference is the person, household, or housing unit, the RFS covers properties. Second, the RFS collects information from two sources: property owners and mortgage lenders. Collecting mortgage data from lenders improves the accuracy of such data. The "Right to Financial Privacy Act of 1978" protects the release of financial records by financial institutions, however, the RFS is exempted from this statute because it is a component of the decennial census.

The 1991 RFS will specifically be designed to meet the data needs of the Bureau of Economic Analysis. Other Federal agencies, including the Department of Housing and Urban Development may provide additional funds for the RFS. These funds will be used to address the data needs of those agencies. The extent to which this funding continues to be available will determine the level at which these needs can be met.

BEA relies on data from the RFS to determine components of the national income and product accounts (part of the calculation of gross national product). Specifically, BEA needs accurate and complete information on personal consumption expenditures, net interest paid, rental income, and housing types. Other Federal agencies rely on RFS data and consider the RFS as a strategic source of benchmark information. The RFS data, including outstanding mortgage debt and outstanding debt held by individual mortgage lenders, along with statistics from other sources, have been helpful in assessing public policies affecting real estate and social welfare, and in developing and evaluating related proposals. Finally, the Congress uses data on mortgage finance to consider legislation and administrative actions on the availability of mortgage funds, to assess the credit risk associated with new mortgage instruments, and to study the proliferation of home equity loans. The Census Bureau is working with these and other users to design and develop the 1991 RFS.

The Census Bureau will send questionnaires to a sample of property owners selected from the 1990 decennial census address records. If the sample property is mortgaged, the Census Bureau will also contact the mortgage lenders. The results will be published and a computer microdata file will be prepared for data users by the fall of 1992.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
2000 Decennial census	Pos./BA	0	0	0	0	12	$784	23	$1,531	11	$747
	FTE/Oblg.	0	0	0	0	13		21		8	
Total	Pos./BA	0	0	0	0	12	784	23	1,531	11	747
	FTE/Oblg.	0	0	0	0	13		21		8	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Demographic statistics programs
Subactivity: 2000 Decennial Census

Goals and Objectives

Goals:

History shows the decennial census has been the occasion for pioneering new methods and technologies from the Hollerith punch card and the first automated data processing for the 1890 census, to the first use of a computer for the 1950 census, development of equipment for optical scanning of microfilm for the 1960 census, changing to mailed questionnaires for the 1970 census, and the use of computer-generated TIGER maps for the 1990 census.

For the 2000 Decennial Census, the Census Bureau will explore cost efficient ways to take the decennial census which concentrate on accomplishing its constitutionally related requirements and producing accurate, high quality data. The Census Bureau will explore options of both profound changes and evolutionary ones. Some changes will be the result of evaluation of the 1990 census. (Simultaneously, others in the Census Bureau will explore ways to collect other demographic and housing data outside the basic decennial census and increase their effectiveness by better targeting user needs.)

Objectives:

The objectives of the 2000 Decennial Census are to reduce (and perhaps redistribute throughout the decade) some of the enormous workload of the decennial census. Restructuring holds promise for improving the capability of the Census Bureau to conduct future censuses.

Specifically, the Census Bureau will attempt to:

o Improve the cost effectiveness of demographic and housing data collection efforts.

- Reduce and simplify the work in the basic decennial census and lessen its logistical requirements.
- Achieve appropriate levels of accuracy for the data depending on its uses.
- Take advantage of new technology that would improve cost effectiveness.
- Ensure that respondent burden levels are reasonable given the value of the data collected.
- Improve the manageability of the entire decennial census process.
- Diversify and reduce the risks now centralized in one large operation conducted only once a decade.

Base Program

The Census Bureau, Department of Commerce, Office of Management and Budget, General Accounting Office, and Congress (House Report 99-669) recognize that an immediate start for research and analysis for the 2000 Decennial Census is necessary. The decennial census is a highly complex and unique under-taking. Social, demographic, and economic changes, such as shifts in composition of the Nation's labor force, and changing living arrangements will necessarily call for some changes in the conduct of the next census. Experience has shown that longer lead times are required to fully test and evaluate program design options for data collection and processing. The associated technologies to support the design also require lengthy procurement and implementation processes.

The 21st Century Decennial Census Planning Staff's fundamental task is to direct and coordinate this early planning effort. It will define the scope and content of the early zero-based review of the decennial census process. It will organize initial assessments of the need for and feasibility of options and innovations. These options may include profound changes. They will certainly include changes resulting from 1990 experience and evaluation of the 1990 census. The 21st Century Staff will explore behavorial and societal trends affecting various alternatives, and analyze relative costs and benefits of those alternatives. The staff will consult and coordinate these efforts with Department of Commerce officials and other Executive branch agencies, and provide an opportunity for input and review by outside groups and census data users.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
INCREASE FOR FY 1991

Activity: Demographic statistics programs
Subactivity: 2000 Decennial Census

		1991 Base		1991 Estimate		Increase/(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
2000 Decennial Census.....	Pos./BA	12	$784	23	$1,531	11	$747
	FTE	13		21		8	

2000 Decennial Census (11 permanent positions, 8 FTE and $747,000). Funds will be used for early planning for the next census, especially to examine the need for innovative changes to meet future challenges and to test the effects of those changes on cost, quality and timeliness. Planning and procurement of automated systems require great lead times. House Appropriation Report 99-669 in particular suggests that research and development begin early on future census automation systems. Test censuses need to be started earlier, particularly if far reaching changes are being considered, with more time between each to allow for sufficient analysis of results. Lastly, early preparations are necessary to gain consensus among the various users and agencies dependent on decennial census information, and to allow time for any necessary legislative review.

Funds are requested for completing detailed benefit/cost studies of alternatives that have survived initial review and are proposed for serious consideration for future censuses. We will incorporate results from the 1990 Research, Evaluation and Experimentation program into our studies as they become available. Clearly, the cost of future censuses must be contained while necessary information is provided in an accurate and timely manner. Already the 21st Century Planning Staff has developed a preliminary cost modeling capability. We will be refining our cost modeling based on actual results from the 1990 census. We will validate and improve preliminary cost estimates. We will collect information on the distribution, actual use and value of the use of census information. We also will estimate the effects of proposed changes on accuracy, quality, and timeliness.

Funds are requested for continuing our exploration of the use of new technologies to improve the decennial census. We will study emerging technologies and their potential use and value in the decennial census. We will begin systematic definition of requirements and planning of system architectures. We will develop specific automation test objectives for field testing early in the 1990's.

Funds are requested for research and development of methods to use administrative records and modeling and estimating techniques as supplements to the data provided by a basic decennial census. We will focus on developing more cost effective ways to provide small area data estimates of value to current users of decennial census data. Such research and development efforts may also provide methods for updating census data during the decade without the expense of large scale surveys.

Funds are requested to begin planning for field tests of new census content, methods, technologies and field structures in 1993, perhaps a major field test. Our approach will be to focus on testing more innovative alternatives early in the decade. In 1991 we should establish test objectives, plan experimental designs, begin site selection and develop a schedule.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Demographic statistics programs
Subactivity: 2000 Decennial Census
Program Change: 2000 Decennial Census

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	$362
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	362
12.1	Civilian personnel Benefits	98
13	Benefits for former personnel	0
21	Travel and transportation of persons	1
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	20
23.3	Communications, utilities and miscellaneous charges	8
24	Printing and reproduction	1
25	Other services	248
26	Supplies and materials	8
31	Equipment	1
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Direct obligations	747

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Demographic statistics programs
Subactivity: 2000 Decennial Census
Program Change: 2000 Decennial Census

Title:	Grade	Number	Annual Salary	Total Salaries
Statistician	14	3	$52,104	$156,312
Statistician	13	4	44,092	176,368
Program analyst	12	4	37,079	148,316
Total		11		480,996
Less lapse		3		118,506
Total full-time permanent		8		362,490

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	8
Other than full-time permanent	0
Total	8
Authorized Positions:	
Full-time permanent	11
Other than full-time permanent	0
Total	11

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Sample redesign	Pos./BA	20	$775	46	$1,887	84	$4,728	84	$4,728	0	0
	FTE/Oblg.	16	764	52	1,901	88		88		0	
Total	Pos./BA	20	775	46	1,887	84	4,728	84	4,728	0	0
	FTE/Oblg.	16	764	52	1,901	88		88		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Sample redesign
Subactivity: Sample redesign

Goals and Objectives

Goals:

The goal of Sample Redesign is to improve sample efficiencies and maintain confidence in the major Federal socioeconomic indicators.

Objectives:

The objectives of this subactivity are to investigate and modify the sample design of major current surveys, improving the quality of data and the cost effectiveness of the sample selection, collection, tabulation and dissemination processes.

Base Program

This program provides for sample redesign and estimation for the major current demographic surveys based on the 1990 census. The Census Bureau conducts major household surveys which provide essential data for the public and private decision-making process. These survey data form the basis for a large portion of the Federal Government's socioeconomic indicators. The surveys include the Current Population Survey (sponsored by the Census Bureau and the Bureau of Labor Statistics), American Housing Survey (Department of Housing and Urban Development), National Health Interview Survey (National Center for Health Statistics), Consumer Expenditure and Point of Purchase Surveys (Bureau of Labor Statistics), National Crime Survey (Department of Justice), Survey of Income and Program Participation (Census Bureau), and Housing Vacancy Survey (Census Bureau). The redesign effort is expected to produce efficiency gains over a ten year period which will maintain public confidence in the statistics produced.

The Census Bureau will concentrate on finalizing the methods of sample implementation; and developing computer and sampling systems and field procedures to implement efficient methods of sample maintenance for the decade.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Geographic support	Pos./BA	123	$9,624	218	$8,504	161	$8,294	161	$8,294	0	0
	FTE/Oblg.	164	8,987	159	9,419	144		144		0	
Total	Pos./BA	123	9,624	218	8,504	161	8,294	161	8,294	0	0
	FTE/Oblg.	164	8,987	159	9,419	144		144		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Geographic support
Subactivity: Geographic support

Goals and Objectives

Goals:

The goal of Geographic Support is to provide the basic maps, reference files and associated processing systems needed to meet the geographic requirements of the periodic censuses and programs.

Objectives:

The objectives of Geographic Support are to portray accurate boundaries of all the legal and statistical areas for which the Census Bureau tabulates data along with the roads and relevant map features required for data analysis and field operations; to document the relationships among the types of geographic areas for which the Census Bureau tabulates data; to apply automated methodologies to provide these geographic support services; and to cooperate with the Geological Survey, U.S. Department of the Interior, to avoid duplication of Federal efforts in map automation.

Base Program

The automated Geographic Support subactivity supports the Census Bureau's goals of controlling costs and improving the timeliness of information from the Census Bureau's periodic programs, current sample surveys, and other activities. The availability of complete, nationwide geographic files provides the capability for efficient production of high quality maps, rapid assignment of residential and business addresses to the correct geographic locations, efficient design of sample surveys, and automation of selected aspects of the periodic programs' data collection, processing and dissemination processes.

The Census Bureau will continue updating the legal boundaries in the automated geographic files for all counties and incorporated places required for Census Bureau programs. The Census Bureau gathers the information needed for this purpose from appropriate local officials who record map changes that result from annexations, detachments, new incorporations or disincorporations. The response rate for this Boundary and Annexation Survey exceeds 95 percent; nearly half of the governmental units report one or more changes.

The Census Bureau will maintain and enhance the address reference information in the automated geographic files for the major urban areas of the United States. We will enhance the address reference information for the major urban areas by updating it using address information compiled during the 1990 Decennial Census. This information permits the rapid assignment of over 60 percent of all household and economic establishment addresses to the correct geographic locations with limited staff intervention.

Maintaining the content of these automated geographic files throughout the decade provides the capability to generate the maps and other geographic products required for the decennial census; the economic, agriculture and governments censuses; post-1990 sample survey redesign operations; state and local redistricting operations; and preparation of materials for innovative programs associated with the 2000 Decennial Census and future Census Bureau statistical programs. They will permit the Census Bureau to classify the geographic locations of housing units, farms, and economic establishments according to the data tabulation requirements of each periodic program, as well as permit the production of the maps that data users require to effectively use the data products.

In FY 1991, the Census Bureau will begin to develop prototype systems to update the automated geographic files using information gathered in consultation with other Federal agencies as well as state governments across the United States. In addition, we will begin to enhance the major components of the computer systems required to support the production of maps and related geographic materials needed for the periodic programs and sample surveys.

The Census Bureau will continue to provide the geographic products needed by local officials to verify and update the locations of county and incorporated place boundaries and will integrate the changes received from the local officials into the automated geographic files, further improving the capability to assign households and economic establishments to the correct geographic areas.

In FY 1993 and beyond, the base program funding increases. This increased level of funding provides for continuing support for the automated geographic-cartographic production system. It includes maintenance of the previously acquired systems and the acquisition of remaining equipment components. This overall system will provide for the storage, maintenance and updating of the geography of the United States on machine-readable media.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Data processing systems	Pos./BA	0	$58,375	0	$36,296	0	$22,552	0	$22,552	0	0
	FTE/Oblg.	0	44,527	0	50,665	0		0		0	
Total	Pos./BA	0	58,375	0	36,296	0	22,552	0	22,552	0	0
	FTE/Oblg.	0	44,527	0	50,665	0		0		0	

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Data processing systems
Subactivity: Data processing systems

Goals and Objectives

Goals:

The goal of the data processing systems activity is to provide a computer environment which is efficient, responsive, and fully adequate for processing and generating economic and demographic statistics.

Objectives:

The objectives of the data processing systems activity are to provide total automated data processing (ADP) support and operational services for processing current and census programs; to provide effective planning and implementation of a comprehensive, long-range ADP acquisition program; and to increase productivity by providing computer (and related) tools to automate manual and other labor-intensive census operations.

Base Program

This program provides for the rental and/or purchase of equipment and other supporting activities related to the Census Bureau's general purpose computer facility. Detailed studies of workload and hardware/software requirements provide cost-effective alternatives, with decisions to lease or purchase specific equipment based on comparisons of costs and the expected usage periods.

The Census Bureau will continue to concentrate long-range planning activities on automated system support to conduct and process the 1990 Decennial Census, replacing outmoded computer facilities, and increasing automation in the headquarters and in the field. The needed ADP facilities and services will be acquired in accordance with Department of Commerce guidelines and the long-range ADP plan.

Specifically, the Bureau of the Census will continue the following activities during FY 1991:

Site preparation ($100,000). This provides for continuing renovations and modifications to the physical areas housing the major computer systems and related ADP equipment.

Printers ($247,000). This provides for continuing lease-to-ownership and/or maintenance expenses associated with both on-line and off-line printing subsystems.

Interactive terminals ($500,000). This provides for continuing replacement of outmoded terminals and acquisition of intelligent end user workstations. These devices are integral components of the Census Bureau's overall plan to enhance the productivity of programmers and non-programmers. Coupled with "user-friendly" software, increased on-line data storage, and effective training, this equipment provides the primary tools and techniques necessary for efficient program development and automation of existing manual procedures.

Distributed communications processors (DCP) ($100,000). This provides for continuing maintenance expenses associated with the communication front-end processor. This system allows us to balance the terminal communications among the four large-scale mainframes and expedite response time for all interactive terminal users.

Field automation ($341,000). This provides for continuing maintenance expenses for equipment used to automate many of the labor-intensive administrative operations performed in regional offices. These systems are designed to increase the efficiency of general office functions, such as budget, payroll, and personnel administration.

Office automation ($172,000). This provides continuing maintenance expenses for the minicomputers used to automate many of the manual office processes and procedures at headquarters. These systems incorporate capabilities such as stored logic with communications, data base management, data entry, general data processing, facsimile (electronic mail), and administrative support/record processing.

Data Preparation Division automation ($237,000). This provides for continuing maintenance of production control and other automation-related systems at the Jeffersonville, Indiana processing facility. This equipment supports functions associated with automated processing, monitoring and flow control activities, as well as mail handling operations.

Tape drives ($336,000). This provides for continuing maintenance of tape drive subsystems. This equipment incorporates improvements in tape movement speeds and recording methodologies.

Integrated statistical laboratory ($100,000). This provides for continuing maintenance and associated software expenses for a system which contains a network of terminals and microcomputers tied to a small-scale computer. Because of its exclusive dedication, it provides for both the high-speed interactive capability and the use of highly-sophisticated user-friendly software needed for effective and timely statistical analysis.

Publication support system ($198,000). This provides for continuing support and maintenance of a Census Bureau-wide system for the interactive preparation of publications, including a standardized computer-generated, quality graphics capability. This system automates all preliminary and final publication processes, allowing significant improvements in the overall timeliness of data releases.

Geographic support system (GSS) ($2,446,000). This provides continuing support for an automated geographic-cartographic production system. It includes maintenance of the previously acquired systems, and the acquisition of remaining equipment components. This overall system will provide for the storage, maintenance and updating of the geography of the United States on machine-readable media.

On-line data storage ($1,300,000). This provides for continuing maintenance expenses of the Census Bureau's on-line storage systems. These disk subsystems reduce tape handling (and the associated human errors), provide an environment necessary to promote interactive processing by nonprogrammers, and decrease turnaround time for the testing and use of computer programs.

Computer replacement #1 ($600,000). This provides for the continuing maintenance and support expenses for the recently acquired UNISYS 1100/94 mainframe. This system is essential to process the Census Bureau's expanding survey and workload requirements.

Computer replacement #2 ($10,217,000). This provides for the continuing maintenance and support expenses for the mainframe computer system acquired in FY 1990, as well as additional equipment. The additional equipment will bring the back-up site to the required computing capacity necessary to process and deliver the decennial census tabulations and other critical time sensitive programs. This also provides for the maintenance and support of the large interactive minicomputers acquired in FY 1990, as well as some logistical expenses for the redeployment and reinstallation of the minicomputers used in the backup and support of the 1990 Decennial Census. These systems make provision for the workload growth associated with post-decennial processing, as well as the need for interactive accessing, editing, and analyzing large volumes of files.

Decennial data capture (DDC) ($3,001,000). This provides for the continuing maintenance and support of equipment installed to support the data collection activities of the 1990 Decennial Census.

Interactive survey analysis resource (ISAR) ($807,000). This provides for the acquisition of an ISAR system to alleviate the serious deficiencies of large mainframes in meeting the processing needs of the growing number of interactive users. This equipment is designed to facilitate the editing, analysis and summary file processing which is too voluminous and complex for self-contained microcomputers and too intensively interactive for effective processing on mainframes.

Computer assisted interviewing (CAI) ($1,850,000). This provides for the continuing development and production of an automated interviewing system, incorporating laptop computers, and a computer-based telephone operation. It also provides for a facility and equipment for the collection of live survey data on a large scale in a production-like environment. This effort is expected to increase the efficiency of data collection, and to enhance data quality through direct data entry.

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent	$94,603	$94,965	$362
11.3 Other than full-time permanent	80,779	80,779	0
11.5 Other personnel compensation	7,152	7,152	0
11.8 Special personnel services payments	0	0	0
11.9 Total personnel compensation	182,534	182,896	362
12.1 Civilian personnel Benefits	25,055	25,153	98
13 Benefits for former personnel	4,424	4,424	0
21 Travel and transportation of persons	7,354	7,355	1
22 Transportation of things	1,765	1,765	0
23.1 Rental payments to GSA	5,580	5,580	0
23.2 Rental payments to others	20,843	20,863	20
23.3 Commun., util., misc. charges	8,853	8,861	8
24 Printing and reproduction	11,927	11,928	1
25 Other services	22,509	22,757	248
26 Supplies and materials	7,309	7,317	8
31 Equipment	17,204	17,205	1
32 Lands and structures	0	0	0
33 Investments and loans	0	0	0
41 Grants, subsidies and contributions	0	0	0
42 Insurance claims and indemnities	0	0	0
43 Interest and dividends	0	0	0
44 Refunds	0	0	0
99 Subtotal, Direct Obligations	315,357	316,104	747
Reimbursable Obligations			
TOTAL OBLIGATIONS	315,357	316,104	747
Personnel Data			
Full-time permanent	2,918	2,926	8
Other than full-time permanent	3,764	3,764	0
Total	6,682	6,690	8
Authorized Positions:			
Full-time permanent	4,166	4,177	11
Other than full-time permanent	11,730	11,730	0
Total	15,896	15,907	11

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
DETAILED REQUIREMENT BY OBJECT CLASS
(Direct obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full time permanent			
	Executive level	0	0	0
	Senior executive service	$1,245	$1,245	0
	General schedule	92,297	92,659	$362
	Commisssioned officers	0	0	0
	Wage board/wage marine	1,061	1,061	0
	Scientific & professional (P.L. 80-313)	0	0	0
	Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
	Examiners of trademark appeals (P.L. 98-622)	0	0	0
	Senior foreign service	0	0	0
	Foreign service staff	0	0	0
	Foreign service nationals	0	0	0
	Consultants & experts	0	0	0
	Students	0	0	0
	Subtotal	94,603	94,965	362
11.3	Other than full-time permanent			
	General schedule	79,547	79,547	0
	Wage board	86	86	0
	Experts & consultants	0	0	0
	Hourly	1,146	1,146	0
	Subtotal	80,779	80,779	0
11.5	Other personnel compensation			
	Overtime	4,597	4,597	0
	SES performance awards	3	3	0
	Cash awards	760	760	0
	Merit pay awards	62	62	0
	Other	1,730	1,730	0
	Subtotal	7,152	7,152	0
11.8	Special personnel services payments			
	Foreign service officers (State)	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
11.9	Total personnel compensation	182,534	182,896	362

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
DETAILED REQUIREMENT BY OBJECT CLASS
(Direct obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits			
	Civil service retirement	$5,191	$5,191	0
	Federal employees' retirement	4,657	4,704	$47
	Thrift savings plan	719	726	7
	Federal insurance contribution act	9,064	9,092	28
	Health insurance	4,462	4,477	15
	Life insurance	209	210	1
	Employees' compensation fund	716	716	0
	Other	37	37	0
	Subtotal	25,055	25,153	98
13	Benefits for former personnel			
	Severance pay	0	0	0
	Unemployment compensation	4,424	4,424	0
	Other	0	0	0
	Subtotal	4,424	4,424	0
21	Travel and transportation of persons			
	Common carrier	3,168	3,168	0
	Mileage	401	401	0
	Per diem/actual	3,365	3,366	1
	Vehicular	420	420	0
	Other	0	0	0
	[Overseas estimates]			
	Subtotal	7,354	7,355	1
22	Transportation of things	1,765	1,765	0
	[Overseas estimates]			
23.1	Rental payments to GSA	5,580	5,580	0
23.2	Rental payments to others	20,843	20,863	20
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	846	846	0
	Rental of office copying equipment	635	637	2
	Other equipment rental	119	119	0
	Federal telecommunications system	1,336	1,336	0
	Other telecommunications services	1,813	1,819	6
	Postal Service by USPS	923	923	0
	Other	3,181	3,181	0
	[Overseas estimates]			
	Subtotal	8,853	8,861	8

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
DETAILED REQUIREMENT BY OBJECT CLASS
(Direct obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
24	Printing and reproduction			
	Publications	$300	$300	0
	Public use forms	834	834	0
	Envelopes	5	5	0
	Other	10,788	10,789	$1
	[Payments to GA, WCF]			
	[Overseas estimates]			
	Subtotal	11,927	11,928	1
25	Other services			
	Training:			
	University	94	94	0
	Office of personnel management	131	131	0
	Other	742	742	0
	Maintenance of equipment	8,654	8,654	0
	GSA reimbursable services	1,790	1,790	0
	ADP services	0	0	0
	Telecommunications services	0	0	0
	Payments to GA, WCF	1,838	1,838	0
	Other non-government contracts	2,323	2,463	140
	Other	6,937	7,045	108
	[Overseas estimates]			
	Subtotal	22,509	22,757	248
26	Supplies and materials			
	Office supplies	1,016	1,021	5
	ADP supplies	1,000	1,002	2
	Other	5,293	5,294	1
	[Overseas estimates]			
	Subtotal	7,309	7,317	8
31	Equipment			
	Office machines and equipment	318	318	0
	ADP hardware	15,048	15,048	0
	ADP software	47	47	0
	Other	1,791	1,792	1
	[Overseas estimates]			
	Subtotal	17,204	17,205	1

1990 DECENNIAL CENSUS PROMOTION

Mr. **Darby**. I think we are going to, while we are changing people, turn on the television and show you some of our promotional efforts the staffs have arranged.

Mr. **Bellomo**. These are seven 30-second clips by the Advertising Council. There are others.

Mr. **Smith**. Have they been on public service on the stations?

Mr. **Bellomo**. Yes, sir.

[Videotape shown.]

Mr. **Smith**. How many languages do you have spots in?

Ms. **Bryant**. For the Spanish ones, we have three dialects. The same words, but spoken by Cubans, Mexican-Americans, and Puerto Ricans.

The Asian one, I believe, is in four languages. We have some of our materials in six languages for these spots.

This is the first time the Ad Council has ever involved minority-owned advertising agencies in doing a public service announcement promotion.

Mr. **Smith**. You just have them in two different dialects and two languages then?

Ms. **Bryant**. Four Asian languages, three dialects in Spanish.

Mr. **Smith**. Oh, I see.

Ms. **Bryant**. Plus English.

Mr. **Smith**. Do you want to proceed with your statement?

PROGRAM HIGHLIGHTS

Mr. **Darby**. Thank you, sir.

We all turn now to the Census Bureau's 1991 budget. The total of the 1991 budget request is $431,337,000. That includes $115.2 million for the salaries and expenses appropriation, and $316.1 million for the periodic censuses and programs appropriation.

STATUS OF 1990 DECENNIAL CENSUS

Before I continue with our explanation of our fiscal year 1991 budget, I would like to briefly describe the status of the 1990 decennial census.

Pre-census activities are complete; we are progressing on schedule. We have opened and equipped seven processing centers, 13 regional census centers, and some 490 district offices.

Through an automated management information system, we were able to closely monitor the cost and the progress of census operations. We have just completed the pre-census phase and local review of the census housing unit counts, which give local officials an opportunity to help us improve our address list.

In addition, we have completed the advance post office check of our address list. In 1980, we were not able to have the post office check any suburban or rural addresses. As a result of these and other operations, we expect to have a very complete address list before the census.

That we are able to have this pre-Census phase at all is due to our highly successful TIGER system, which produces on a timely basis the maps local officials used to conduct their review.

In 1980, we had to cancel the pre-Census local review because of lateness in preparing maps and other geographic materials.

Over 100 million questionnaire packages have been produced and are being shipped to the post offices and Census district offices for delivery. Questionnaire delivery by Census enumerators begins next week in rural areas in the South and Midwest. Census promotion and outreach activities are beginning to build up steam as we approach Census Day.

In late January, the Ad Council distributed Census advertising materials to the appropriate electronic and print media. Separate television ads were produced for the general audience: blacks; Hispanics, separate versions for Mexicans, Puerto Ricans, and Cubans; and Asians, with separate versions for Chinese, Japanese, Koreans, and Vietnamese.

Census Day for the 1990 Census is April 1st, only 32 days away. In fact, we have already begun the census in remote areas of Alaska because of the spring thaw.

On March 20th, we will enumerate selected components of the homeless population living in shelters and on the street. Our mission is to count everyone. And we are undertaking unprecedented efforts to do so.

On March 23rd, over 90 million housing units will receive their questionnaires in the mail.

A major concern is that the recent congressional cuts of $57.6 million from the President's request on top of previous cuts and cost absorptions might compromise our ability to conduct a full and fair census. In particular, we contemplated making the vacant/delete check contingent upon the mail response rate.

However, we have resolved definitely to proceed with the vacant/delete check as originally planned. If the mail return rates substantially exceed that which we have used for our planning base, it will be possible to do so within the currently appropriated amount. Otherwise, we intend to propose a dire emergency supplemental appropriation, with offsetting expenditure reductions, in late April when we shall know the actual mail return rate, and thus the amount of money needed to complete the Census.

We will monitor carefully the mail return rate and keep the committee apprised. Of course, other totally unanticipated setbacks, such as natural calamity, may necessitate a supplemental as well. I understand that supplemental appropriations have been required during past decennial years.

SALARIES AND EXPENSES

Turning to salaries and expenses. Our request for these current statistical programs is $15.3 million more than the post-sequester 1990 appropriation. This includes $5,365,000 in adjustments to base, and $9,978,000 for net program changes. These changes are part of the Presidential initiative to improve economic statistics we discussed before.

The Bureau has an able and dedicated work force which has made substantial contributions to the Nation's statistical system despite budget constraints. However, problems remain in rapidly changing areas of the economy where data and information are urgently needed.

In the current economic statistics activity, we are proposing program changes totaling $7,021,000. Our proposed program increases for FY 1991 will improve the quality of data in a variety of critical areas of the economy, including retail sales, the rapidly changing and growing service sector, emerging growth industries, new and projected investments, manufacturers' shipments, inventories and orders, and foreign trade statistics.

These program increases will also fund improved standard industrial classification (or SIC), coding of new business, research on the SIC system itself, and the Census Bureau's participation with the Office of the Under Secretary for Economic Affairs in the National Trade Data Bank, which was authorized by the Omnibus Trade and Competitiveness Act of 1988.

To address these needs, while recognizing the currently constrained budget situation, we are also proposing reductions in program activities for Current Industrial Reports, the Survey of Plant Capacity Utilization, Government Finance Survey, and elimination of reports on cotton ginning.

In the current demographic statistics activity, net program increases of $3,076,000 will modernize the Current Population Survey (or CPS) processing system. The CPS is used to measure overall unemployment and employment. This is one of the highest priorities of the joint Census Bureau and Bureau of Labor Statistics Conference on the Future of CPS.

The increases also will improve the estimates of personal and family money and non-money income, and use of Government programs collected by the Survey of Income and Program Participation (or SIPP) by increasing the sample size to measure effects on disadvantaged groups and allowing us to examine as well the basic metropolitan statistical area's concept.

The base for population estimates and projections will be reduced.

The fiscal year 1991 budget includes a program decrease of $119,000 in the data systems development subactivity, as well as a base reduction of $131,000.

PERIODIC CENSUSES AND PROGRAMS

Our request for $316,104,000 for the periodic programs is $998,732,000 less than the post-sequester appropriation for 1990. This includes a reduction of $1,011,198,000 for planned cyclical changes, which is primarily due to changes in the decennial census, $11,719,000 for adjustments to base, and a program increase of $747,000.

PERIODIC ECONOMIC STATISTICS PROGRAMS

Turning to the economic statistics programs, again, the request of $29,753,000 provides funding for the second year of the 1992 economic censuses, census of agriculture and census of governments.

The funding will provide for planning and preparatory activities to establish the scope, coverage, content and methodologies that will be employed in the collection, processing and publication of the 1992 censuses.

DECENNIAL CENSUS BUDGET IN 1991

In early fiscal year 1991, we will undertake many activities necessary to meet the goal of delivering apportionment counts to the President by December 31, 1990, as required by law. This will require a budget of $245,789,000 in fiscal year 1991. These activities include questionnaire processing operations, such as edit, filming, keying, computer entry, tabulation, and a second opportunity for local officials to review census housing unit counts. Fiscal year 1991 is the first year that the official results of the 1990 census enumeration will be available to the public. The budget cycle for the 1990 decennial census ends in fiscal year 1993. I mention this because it is important to remember that there are important analysis and data dissemination activities that extend beyond this year's peak activity.

2000 DECENNIAL CENSUS

The decennial census is a highly complex and unique undertaking and we recognize that an immediate start for research and analysis for the 2000 decennial census is necessary. We are requesting $1,531,000, including a program increase of $747,000 to increase our planning efforts for the 2000 decennial census, an effort that we, the GAO, and this committee continue to acknowledge.

OTHER PERIODIC PROGRAMS

We are requesting a combined total of $39,031,000 for periodic programs that provide sample redesign, intercensal demographic estimates, geographic support and data processing systems, programs of ongoing importance that support our Nation's data needs.

Again, Mr. Chairman, I wish to reiterate the importance of the 1991 activities that I have outlined today. In 1991, we will achieve our goals for delivering apportionment counts to the President and redistricting data to the States, improve key economic statistics and begin planning for the 2000 decennial census.

That concludes my statement. Thank you, Mr. Chairman.

[The prepared statement of Dr. Darby follows:]

PREPARED STATEMENT ON BUREAU OF THE CENSUS BUDGET

DR. MICHAEL R. DARBY

UNDER SECRETARY FOR ECONOMIC AFFAIRS

Before the Subcommittee on

Commerce, Justice, State, the Judiciary and Related Agencies

Committee on Appropriations

House

February 28, 1990

Thank you, Mr. Chairman, and members of your committee. I appreciate the opportunity to present and to explain the Census Bureau's 1991 budget.

PROGRAM HIGHLIGHTS

The total of the 1991 budget request is $431,337,000. That includes $115,233,000 for the Salaries and Expenses Appropriation, and $316,104,000 for the Periodic Censuses and Programs Appropriation.

STATUS OF 1990 DECENNIAL CENSUS

Before I continue with an explanation of our FY 1991 budget, I'd like to briefly describe the status of the 1990 Decennial Census. Precensus activities are complete or progressing on schedule.

We have opened and equipped 7 processing centers, 13 regional census centers, and some 490 district offices. Through an automated management information system we are able to closely monitor the cost and progress of census operations.

We have just completed the precensus phase of local review of the census housing unit counts, which gives local officials an opportunity to help us improve our address list. In addition, we have completed the advance Post Office check of our address list. In 1980, we were not able to have the Post Office check any suburban or rural addresses. As a result of these and other operations, we expect to have a very complete address list before the census.

That we were able to have this precensus phase at all is due to our highly successful TIGER System, which produced on a timely basis the maps local officials used to conduct their review. In 1980, we had to cancel the precensus local review because of lateness in preparing maps and other geographic materials.

Over 100 million questionnaire packages have been produced and are being shipped to the post offices and census district offices for delivery. Questionnaire delivery by census enumerators begins next week in rural areas in the South and Midwest.

Census promotion and outreach activities are beginning to build up steam as we approach Census Day. In late January, the Ad Council distributed census advertising materials to the appropriate electronic and print media. Separate television ads were produced for the general audience, Blacks, Hispanics (with separate versions for Mexicans, Puerto Ricans, and Cubans), and Asians (with separate versions for Chinese, Japanese, Koreans, and Vietnamese).

Census Day for the 1990 census -- April 1 -- is now only 32 days away. In fact, we have already begun the census in remote areas of Alaska, before the spring thaw.

On March 20, we will enumerate selected components of the homeless population living in shelters and on the street. Our mission is to count everyone and we are undertaking unprecedented efforts to do so.

On March 23, over 90 million housing units will receive their questionnaires in the mail.

A major concern is that the recent congressional cuts of $57.6 million from the President's request on top of previous cuts and cost absorptions might compromise our ability to conduct a full and fair census. In particular, we contemplated making the vacant/delete check contingent upon the mail response rate.

However, we have resolved definitely to proceed with the vacant/delete check as originally planned. If the mail return rate substantially exceeds that which we have used as our planning base, it will be possible to do so within the currently appropriated amount. Otherwise, we intended to propose a dire emergency supplemental appropriation, with offsetting expenditure reductions, in late April, when we shall know the actual mail return rate and thus the amount of money needed to complete the census. We will monitor carefully the mail return rate and keep the committee apprised. Of course other totally unanticipated set backs, such as a natural calamity, may necessitate a supplemental. I understand that supplemental appropriations have been required during past decennial census years.

SALARIES AND EXPENSES

Our request for current statistical programs is $15,343,000 more than the post sequester 1990 appropriation. This includes $5,365,000 in adjustments to base, and $9,978,000 for net program changes. The changes are part of the Presidential initiative to improve economic statistics. The Bureau has an able and dedicated workforce which has made substantial contributions to the Nation's statistical system despite budget constraints. However, problems remain in rapidly changing areas of the economy where data and information are urgently needed.

In the Current Economic Statistics activity, we are proposing program changes totalling $7,021,000. Our proposed program increases for 1991 will improve the quality of data in a variety of critical areas of the economy, including retail sales, the rapidly changing and growing service sector, emerging growth industries, new and projected investments, manufacturers' shipments, inventories and orders, and foreign trade statistics. These program increases will also fund improved Standard Industrial Classification (SIC) coding of new business, research on the SIC system itself, and the Census Bureau's participation with the office of the Under Secretary for Economic Affairs in the National Trade Data Bank, which is authorized by the Omnibus Trade and Competitiveness Act of 1988. To address these needs while recognizing the currently constrained budget situation, we are also proposing reductions in program activities for Current Industrial Reports, the Survey of Plant Capacity Utilization, Government Finance Survey, and the elimination of reports on Cotton Ginning.

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The increases also will improve the estimates of personal and family money and non-money income, and use of government programs collected by the Survey of Income and Program Participation (SIPP) by increasing its sample size to measure effects on disadvantaged groups, and allow us to examine the basic metropolitan statistical areas concept. The base for Population Estimates and Projections will be reduced.

The FY 1991 budget includes a program decrease for $119,000 in the Data Systems Development subactivity as well as a base reduction of $131,000.

PERIODIC CENSUSES AND PROGRAMS

Our request for $316,104,000 for periodic programs is $998,732,000 less than the post sequester appropriation for 1990. This includes a reduction of $1,011,198,000 for planned cyclical changes, which is primarily due to changes in the decennial census; $11,719,000 for adjustments to base; and a program increase of $747,000.

ECONOMIC STATISTICS PROGRAMS

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The funding will provide for planning and preparatory

Department of Commerce
Bureau of the Census
Periodic Censuses and Programs
DETAILED REQUIREMENT BY OBJECT CLASS
(Direct obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	$315,357	$316,104	$747
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	315,357	316,104	747

Department of Commerce
Bureau of the Census

Periodic Censuses and Programs
CONSULTING AND RELATED SERVICES
(Obligations in thousands)

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Consulting services......................	$ 3,279	$ 768	$ 575
Management and professional services.....	5,293	5,401	984
Special studies and analyses.............	155	718	663
Management and support services for research and development.............	...	...	...
TOTAL................................	$ 8,727	$ 6,887	$ 2,222

The principal program beneficiary of advisory and assistance services procured in the periodic censuses and programs appropriation is the Decennial Census, which reaches the peak of its cyclical activity in FY 1990. Advisory and assistance services are particularly needed in the Decennial Census for advice and assistance on outreach and advertising programs to ensure full cooperation with the census, particularly among hard to enumerate minorities, which require specific skills and experience not available in the Bureau; and advice and assistance for the automated data processing equipment which will be used in over 470 temporary field locations, to supplement the current staff in the design, development and deployment of census-specific data capture equipment used in the decennial census. Procurement of advisory and assistance services drops off sharply during FY 1991, the year following the Census Year.

In FY 1990 and FY 1991, the Bureau plans to procure advice and assistance, using the experience and skills of business, academic and other private sector groups, in a number of areas to improve the Economic Censuses: suggestions for improved classification systems, to represent more adequately a changing economy; improved forms design, to reduce non-sampling errors; methods of electronic data collection; and studies on the structural changes, emerging trends, and data needs which will affect planning for the 1997 Economic Censuses.

activities to establish the scope, coverage, content, and methodologies that will be employed in the collection, processing, and publication of the 1992 censuses.

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That concludes my prepared statement.

Thank you, Mr. Chairman.

1990 SEQUESTRATION

Mr. SMITH. How did you handle the sequester? It was a small amount, I guess, compared to other things, but how did you handle that?

Mr. DARBY. It was taken across the board. There is $8,131,000 in the periodic and $1,398,000 in the ongoing or S&E account, for a total of a little over $9,500,000.

DIRE EMERGENCY SUPPLEMENTAL

In addition, there was a $57,000,000 specific cut that was taken by the decennial and that is the problem that I alluded to in terms of the possible need for a dire emergency supplemental.

Mr. SMITH. And what are you going to offset? Your supplemental, if you have one, will propose an offset?

Mr. DARBY. We would not be able to take it solely within Economic Affairs. I would defer to the people in OMB and the department.

Mr. SMITH. Well, that is probably not going to work. I do not know what they are going to pick out, but the way the rules work around here, if you try to just pick out something in some other department, that is not very easy to do. What happens if you do not get it?

Mr. DARBY. Well, our first hope is that our mail response rate will be high enough that we will not need to come back.

If we do not get the funding, I do not see how we can get the census completed on time.

Mr. SMITH. Is it a matter of time, or will you not do as much follow-up?

Mr. DARBY. Well, the problem is the commitment to count, as the Constitution puts it, the whole number of persons in each State. The major follow-up operations are ways that we know of finding people whom we have missed. So, to delete the vacant/delete check, for example, that involved not counting approximately 2 million people we know how to count and I think that is——

Mr. SMITH. Well, this supplemental is not for that entire amount of money, is it?

Mr. DARBY. We do not know how much we would need until we see the results. Certainly, our hopes are that if we need to come forward with a supplemental, that it would be for a smaller amount. But until April, there are great uncertainties as to how well these ads and the other parts of our outreach program, which are very extensive this time, compared to before, will work.

If the public responds well, if we do as well as we did in 1980, then we do not anticipate needing a supplemental. We expected not to do as well as in 1980 and I think that is a wise and conservative approach. But if that comes true, then I think we will need to find some sources of at least delaying other expenditures to——

VACANT/DELETE OPERATION AND MAIL RESPONSE RATE

Mr. SMITH. Well, let us put it a different way. What is the least important follow-up activity and what does that cost?

Mr. **Darby**. Well, I think that our feeling was that, in terms of things that we could have terminated and left and certainly had any flexibility, it was the vacant/delete recheck and that costs about $60,000,000.

Mr. **Smith**. The what?

Mr. **Darby**. The vacant/delete operation. We go back and find out whether or not houses that were identified as vacant in the initial attempt by enumerators to find people were in fact vacant. We find out that a number of those, in fact, are occupied. We found 1.7 million people in 1980 with this procedure. It is one of the less cost-effective operations.

Mr. **Smith**. What does that cost per-person?

Mr. **Darby**. About $35.

Mr. **Smith**. Are those people, from past experience, concentrated in certain kinds of areas or are they pretty well spread around the country?

Mr. **Darby**. They seem to be disproportionately concentrated in urban and disadvantaged areas. So we are particularly concerned in terms of our commitment to eliminate undercount in those hard to count areas, to not miss the people or——

Mr. **Smith**. Of course, there are some of those areas in every State, but within the State you are saying they are primarily in those areas?

Mr. **Darby**. I think disproportionately and not exclusively.

Mr. **Smith**. And that is $60,000,000?

Mr. **Darby**. Yes, sir.

Mr. **Smith**. Well, you would not be short more than $60,000,000, would you?

Mr. **Darby**. We do not believe so, unless we have a disaster in terms of the mail response rate.

Mr. **Smith**. What if it is $20,000,000 or $30,000,000, what can you do?

Mr. **Darby**. Well, although it is getting later, of course, in the process, and I do not want to speculate beyond what we know about the progress to date, but I think if it turns out that we are near $10,000,000, we can probably rearrange things and move them in time, without major difficulty, and certainly some of that would be done in any case, if we needed to come for a supplemental.

As to exactly how low the mail response rate could go before we needed to find other sources of funding outside of the census, I really do not think we know yet. I think we will know in April. We are just beginning to go into the really expensive part of the census operation and there is a lot of uncertainty.

Ms. **Bryant**. The mail response level, about which we are talking, is somewhere between 70 and 75 percent return by mail, every 1 percent represents $10,000,000, and that is why until we know that mail response, it is hard to get a handle.

Mr. **Smith**. Those that answer by mail, what does it cost per person?

Mr. **Darby**. It saves us about $10 per person, on average, for everyone that answers through the mail or, alternatively, costs us $10 per person for everyone who does not answer through the mail.

Mr. SMITH. But you said these others cost $35.

Ms. BRYANT. They are the last 1 percent of the population we will bring in on the census, and that is essentially the——

Mr. SMITH. Is that a one-step deal, or what is involved in that step that costs $35?

Ms. BRYANT. First of all, they did not respond to the questionnaire. We have sent the enumerator out and the enumerator is supposed to make about four calls on the house and then says it is vacant. The vacant/delete procedure involves sending a different enumerator out, possibly someone more experienced, a few weeks later to check the house again. The experience in 1980 was that 10 percent of those checked households proved to be occupied and we picked up about 1.7 million people, which is the last half a percent of those we bring in.

Mr. SMITH. I wonder how many of those may have moved in after April 1st.

Mr. DARBY. Well, they did check on exactly were they there on April 1st. They may have been away on vacation, for example.

Mr. SMITH. Then, if you try four times, could you not cut that to three or two, or does that save any money?

Mr. DARBY. We do not believe it does.

Ms. BRYANT. Because we are trying to hit different times of the day. These tend to be sort of mobile people who do not stay home much.

Mr. SMITH. I see.

Ms. BRYANT. So, we hit weekends and at night.

Mr. DARBY. And they will be going to other houses in the same block.

Mr. SMITH. Mr. Rogers?

Mr. ROGERS. Are you saying that the first check of that vacant house is made, if they do not respond to mailout questionnaire?

Ms. BRYANT. Assuming most of those households would be in the mail areas. Now, some of them might be in public housing and in some of the public housing units, we are actually having enumerators handle every questionnaire. Essentially, they are ones that we are going back to multiple times to bring in that last half a percent.

Mr. ROGERS. Well, in 1980, the 1.7 million people that you turned up on the vacant/delete count, I am told that 39 percent of them were minority people.

Ms. BRYANT. Yes.

Mr. DARBY. Yes.

Ms. BRYANT. They are disproportionately minority. They are disproportionately in what you might call difficult-to-enumerate urban neighborhoods.

Mr. ROGERS. So, you are telling us you are going to be doing the vacant/delete if your mail returns——

Ms. BRYANT. We are going to do the vacant/delete, we have to do that.

Mr. ROGERS. Regardless?

Ms. BRYANT. Yes.

Mr. ROGERS. Regardless of what the mail percent return is?

Mr. DARBY. Yes, sir.

Mr. Rogers. So, what you are saying is you are going to tell us how much extra you are going to need in April, when you get the mail count back, is that correct?

Mr. Darby. Yes, if we need anything extra, we will tell you in April that we have a problem and we will keep the committee apprised as we begin to get data.

Mr. Rogers. Well, if you do not do the vacant/delete count, it seems to me it might invite some sort of mechanical adjustment to the numbers after the count is done, which I have got a problem with myself, and I suspect others do. So, I would hope that we could do the vacant/delete, do it the right way and get it done with and get it over with.

Mr. Darby. That is our intention, sir. We are committed to that and we, too, believe that it would be inappropriate to omit an activity that is known to have this disproportionate effect on the count.

ADJUSTMENT

Mr. Rogers. Let me switch gears a bit on the adjustment issue. Would you explain how adjustment would work, if it were done?

Mr. Darby. Okay. The proposal for adjustment involves taking a small intense survey, involving somewhat less than 1 percent of the households in the United States that are stratified into different types. So, one stratum might be certain types of urban areas, with high minority and renter populations, for example. Another might be suburban areas. Another would be areas within non-urban, towns in non-urban, and so forth. There are about a hundred of these different types of blocks.

Each block in the United States would be classified and represented by a relatively small number of blocks in this post-enumeration survey. That data, possibly in combination with other information on the age, sex, race makeup of the overall population, would be combined to estimate undercount and overcount rates for different groups of the population in each strata.

For example, suppose that in a town in a non-urban area, a town in Iowa, for example, we found that typically mature women were overcounted. We might find, say, 5 percent overcount, and then under the proposal, for every 20 of these women, we would put a negative woman into a house, sort of above the block, and cancel her out of the count.

Mr. Rogers. I do not know any negative women. [Laughter.]
trying to report it.

On the other hand, say, in urban areas it was found that young black males were undercounted by 5 percent, then for every 20 counted, one would be replicated or cloned and put in this adjusted person's house above the block, because we have to give age, sex and race characteristics for each person. This would be done and all of these adjusted persons, be they positive or negative, would be combined to get an adjusted total of persons.

So, some areas would be given a total with fewer people than actually turned in the census forms, other places would be given an adjusted number with more people than turned in their census forms or were found by enumerators. That in a nutshell is the basis of the adjustment proposal.

Mr. **Rogers**. It is a form of a guess, is it not?

Mr. **Darby**. Well, it is certainly a statistical estimate based upon a modeling procedure, rather than actually counting people.

Mr. **Rogers**. It is a guess.

Mr. **Darby**. That is another name for statistical estimates.

Mr. **Rogers**. Well, would the smaller States have equal representation with the larger States in that kind of adjustment scheme?

Mr. **Darby**. I am not sure—do you mean in terms of the selection for the post-enumeration survey or—let me try the question and see if this is what you were getting at.

We will over-sample the areas that are believed to be particularly hard to count, in terms of the undercount.

Mr. **Rogers**. Irrespective of the size of the State, small or large?

Mr. **Darby**. Well, we will sample blocks based on block characteristics. Now, to the extent that those blocks are in urban areas, with large minority populations, largely renters, and that those urban areas tend to be concentrated in large States, that would lead to over-sampling. There probably is over-sampling of large States, but the sampling is not done by State, because, for example, if there were in Kentucky such a block or a series of blocks with these same block characteristics, it might be included in the sample for that stratum or the block might be represented by New York or Chicago or Los Angeles or other blocks that are classed by the statisticians in the Census Bureau as having those same characteristics.

Ms. **Bryant**. There are 5,000 blocks in the post-enumeration survey. Each of them has one of 101 characteristics or what he referred to as stratums. Every block in the country will be tagged as one of those 101 types, and based on what happens in the ones in the sample, then, is how you adjust all blocks of that type across the country. So, every county, every block would be included in the adjustment, some would go up, some would go down, and many would stay the same.

Mr. **Kolbe**. Would the gentleman yield for a question?

Mr. **Rogers**. I yield.

Mr. **Kolbe**. Have the blocks in the post-enumeration study been identified now?

Ms. **Bryant**. They have and that sample is under lock and key, so that there is no way those who are working on the decennial would know that this is one of the blocks that is going to be checked.

Mr. **Rogers**. You would use the post-enumeration survey method of making the adjustment, correct?

Mr. **Darby**. Well let me qualify that in two ways. One, we have agreed that the Secretary will decide by July 15, 1991, whether or not to make an adjustment, so we certainly have not agreed to——

Mr. **Rogers**. I say if you do the adjustment, it will be by the PES method, right?

Mr. **Darby**. Well, the PES would be an input. Now, it may be that it is necessary, in order to improve the accuracy of that method, to combine that with demographic analysis, as it is called, to limit implausible age, sex, race ratios that might be implied by the PES, which, after all, is a less than 1 percent sample.

So, I think it is fair to say that the methodology is not completely worked out yet. The Census Bureau is completing that and, of course, we will have to have the exact methodology worked out by this summer, but we are not there yet. We are not exactly sure what are the criteria. We have agreed to publish next month the criteria; they are technically known as guidelines.

FUNDING FOR ADJUSTMENT

Mr. **Rogers**. Are there any monies in your request for a post-enumeration survey?

Mr. **Darby**. They were in the fiscal year 1990, yes, but not for an adjustment purpose. We agreed to do what we had always planned to do, that is, an evaluation post-enumeration survey.

Mr. **Rogers**. What I want to know is do you have any money in this request for an adjustment to the numbers that turn up in the census.

Mr. **Darby**. No, sir.

Mr. **Rogers**. Therefore, you would not be able to do the adjustment, unless you came back for a supplemental?

Mr. **Darby**. Well, I guess I misspoke, in the sense that the cost is so small that we have not identified any specific dollars. The intention was, if the Secretary decided to do the adjustment, to use the funds in the base, but we have not requested specific funding for an adjustment. Certainly, Bureau appropriated funds were intended to be used.

Ms. **Bryant**. Post-enumeration surveys——

Mr. **Rogers**. I am sorry, what was the last part of your statement?

Mr. **Darby**. We certainly anticipated using appropriated funds in fiscal year 1991 to do an adjustment, if the Secretary had decided or were to decide to do so.

Mr. **Rogers**. When will he make that decision?

Mr. **Darby**. On or before July 15, 1991. The data must be published no later than July 15, 1991, if he were to decide to adjust. If he decides not to adjust, he is committed to explaining his reasons for that decision and how they relate to these guidelines we will be publishing next month in final form, the criteria that should be used in making such a decision.

STATISTICAL IMPUTATION

Mr. **Rogers**. Has a statistical inference ever been used to construct the census numbers?

Mr. **Darby**. I do not believe it is fair to say that a statistical inference has been used. There are imputations, but those are based upon actual evidence, rather than inference from a model. This would be a model based inference in which we would not be able to provide an auditor, if you will, with evidence that people were actually there where we said they were. They would only be able to test the assumptions of the model.

In the past, we have done imputations. For example, in the 1980 Census, we imputed data for approximately 3.5 million people. For 2.75 million of those, we did not have all of their characteristics, age, sex, race. As a matter of fact, we did not even have more than one characteristic.. Those characteristics were imputed by what the people living in their neighborhood seemed to be.

For another three-quarters of a million people, we had physical evidence that the house was actually occupied, but we were never able to find by reliable witness how many people lived there and what they were like. For those places where we had reliable evidence that the house was occupied, although we did not know by whom, we followed an imputation method. So, in that sense I think that is a rather different procedure than is contemplated in the adjustment.

Mr. ROGERS. Well, if the Secretary decides to do an adjustment, would you be required to seek to reprogram funds for that purpose?

Mr. DARBY. No, sir.

Mr. ROGERS. That is all.

Mr. SMITH. Mr. Kolbe?

ADJUSTMENT

Mr. KOLBE. Mr. Chairman, I am going to follow up on some of the questions Mr. Rogers asked on the question on the statistical adjustment.

You said that the blocks that are going to be used in the—what is the word I want?

Ms. BRYANT. Post-enumeration survey, they call it.

Mr. KOLBE. Have those blocks been selected already?

Ms. BRYANT. Yes, they have. And the addresses on them have been identified. A different set of census enumerators was sent out to do an address listing on those. Those maps are, in a sense, locked up and will not be used again until this survey occurs after the census.

Mr. KOLBE. Well, what was your reference to the security; that they are under lock and key? I do not understand. They are identified. They are known.

Ms. BRYANT. Only to individuals one at a time, only to a few people, not including me or Mr. Darby; the reason being that a post-enumeration survey is supposed to be an independent evaluation of the census. We would not want interviewers doing their own follow up to do a better job than normal in specified blocks. Therefore, the post-enumeration survey is an independent evaluation survey.

Mr. KOLBE. But it was necessary for what reason to do that selection now beforehand? There are a lot of people, I will tell you, who flatly believe that there are people out there that know exactly where the post-enumeration study blocks are going to be, and that they intend to try to skew the initial census on that basis.

Ms. BRYANT. The enumerators who listed addresses, of course, are under Title 13 confidentiality—five years in jail, $5,000 fine if they reveal the blocks. No one enumerator would know all—an enumerator would have listed one or two blocks. The reason they were done early is just the whole process of putting together a survey which will follow immediately in June and July after the census. We did not want that work going on at the time of the census.

Mr. KOLBE. When does the post-enumeration study happen?

Ms. **Bryant**. Well the actual field work will be in June and July.

Mr. **Kolbe**. Of this year?

Ms. **Bryant**. Yes.

Mr. **Kolbe**. But then the decision about whether or not to use that would not be made for a year and——

Ms. **Bryant**. Well, it takes that long to do all the analysis.

Mr. **Kolbe**. On the initial census and the post-enumeration?

Ms. **Bryant**. Yes.

Mr. **Darby**. Yes.

Mr. **Kolbe**. So these will go on separate tracks. The decision will be made whether to overlay that information in August of 1991?

Ms. **Bryant**. No.

Mr. **Darby**. By July 15.

Ms. **Bryant**. By July, so that means——

Mr. **Kolbe**. July of 1990?

Ms. **Bryant**. No, July 1991. So that means the analysis would be going on in the winter of '90 and spring of '91.

Mr. **Kolbe**. So the data that it is delivered to the States in April of 1991 will be not valid then?

Ms. **Bryant**. It will be the count as enumerated.

Mr. **Kolbe**. In the census?

Ms. **Bryant**. Yes.

Mr. **Kolbe**. Right. If it was determined that a post-enumeration analysis or study should be used for statistical adjustment, then new enumeration data would be delivered to the State at what point?

Mr. **Darby**. Well it would be new population counts, because we will not be re-enumerating.

Mr. **Kolbe**. New population data, block by block, correct?

Mr. **Darby**. That is correct.

Mr. **Kolbe**. That would be delivered at what time?

Mr. **Darby**. On or before July 15th. Given the great difficulty, and this is something that I should speak to, the great difficulty in meeting that date, it would be very unlikely that we could deliver it much before July 15th.

When we were settling the lawsuit that resulted in the stipulation that we have been basically discussing here, the decision by July 15th, there was discussion on when should the decision be made? We advised the plaintiffs that it would probably not be until September that we could assuredly have the analysis done necessary to have a chance to make a positive decision.

And we advised them that by July 15th, we had a 50/50 chance of completing the analysis. For reasons presumably out of concerns about their redistricting, they chose the earlier date, even though it made it less likely that a favorable decision could be made.

REDISTRICTING

Mr. **Kolbe**. How are decisions about redistricting in States that have relatively early primaries and early filing deadlines supposed to be made if the new data is not given to them by July 15th, let's say, of 1991? How is a State supposed to accomplish the redistricting?

Mr. **Darby**. That is a difficult question. And originally, I think part of the reason that the majority of the professional staff at the census opposed the adjustment proposal had to do ~~with these~~ kinds of feasibilities; that the States really needed the data by April at the latest for redistricting.

The Federal judge in the case we have been discussing indicated that he believed those deadlines should not be viewed as binding, and we were required to more or less abstract from them. I think that it would be a concern—certainly in making the policy decision of whether or not to adjust—whether or not we would disrupt the redistricting and reapportionment procedure.

Mr. **Kolbe**. Well I would hope there would have been maybe some other reasons that professionals at the Bureau would have opposed it.

Mr. **Darby**. Oh, there certainly were.

Mr. **Kolbe**. That is, that there is no shred of evidence in any literature on a theoretical or philosophical basis that a statistical adjustment can give you a more accurate count.

Mr. **Darby**. Well I must confess that I think that is a controversial issue. There are some statisticians who believe very strongly that it can improve the accuracy. There are others who believe equally strongly that it will not.

VALIDITY OF DATA

Mr. **Kolbe**. Do you think it improves the validity of the data for the business person who is buying this data to use? I mean, are they going to know where the fake houses are, the fake people are, as opposed to the real people?

Mr. **Darby**. Well they will know where the adjusted persons are. We would be reporting that so they could take them out if they chose to.

Mr. **Kolbe**. Oh, they will be able to take the——

Mr. **Darby**. And of course, the plan is to report the actual enumeration in any case.

Mr. **Kolbe**. Side by side.

Mr. **Darby**. So they will already have the enumerated data, if that is what they prefer, if the decision were made to adjust. But presumably, if it increases the accuracy of the census, and I do not think that this adjustment decision could be made positively unless there was clear and convincing evidence that we were making things better, then presumably the business buyers would want the adjustment.

If we do not have that evidence, then I do not anticipate that they would be faced with the problem.

Mr. **Kolbe**. Well, I would just say that I find it distressing that the Census Bureau was willing to concede so easily on this point in the consent decree. I find it—as my colleague Mr. Rogers does—very troubling that we are going to do something with the census that I think fundamentally undermines the credibility and validity of the census.

I have long contended that the census ought to be a count, the very best count we can get, of everybody who is there. And for that reason, I would disagree with my colleague on the issue of the illegal aliens, about which I have a question here. But to start playing these kinds of games with the data, I think is absolutely the most damaging thing we could possibly do to the census.

Mr. **Darby**. Sir, if I may respond to that briefly. I think that the Secretary has agreed to reopen that decision, which was made in 1987 by the previous administration, and to reexamine it with a fresh mind. He has not agreed to make a particular decision one way or another, and I think he has retained an open mind today.

Now I think that the belief in the Census Bureau and the belief in the Commerce Department is that the most important thing in 1990 was to be allowed to continue with the census, which was proceeding according to well-founded plans. We were at considerable risk that the Federal judge would prevent us from either taking the census or doing the follow-up operations necessary to take a full and fair census.

There was a proposal from the plaintiffs asking him to order us not to do the follow-up operations and to rely solely on the post-enumeration survey, so as to get counts, adjusted counts, out by April 1. We felt that the Nation would be better served if the traditional census was taken in the best possible way in 1990, and the decision on whether or not to adjust were deferred to 1991.

If we fulfill our goal to take the best possible census in 1990, it will be technically impossible to improve on those counts. Only to the extent we do not do a good job on the census in 1990, resulting in an under-count problem, will we be faced with a hard decision in 1991.

So that was the reasoning. I agree that it was a hard choice.

Mr. **Kolbe**. I understand the gun you were under; but I am just here to predict that if we use a statistical adjustment, we will have chaos in redistricting from the courthouse to the U.S. Capitol, not just in 1992 but through the entire decade. It will just be chaotic.

IMMIGRATION AND NATURALIZATION SERVICE POLICIES

Let me, if I might, turn to the other subject very quickly. One of the real concerns we have had has been the actions of the Immigration and Naturalization Service in conducting raids during the decennial census. During the 1980 census, the INS adopted policies to suspend those raids and other high publicity activities, regardless of whether or not they caught anybody who was illegal, and people who are illegal should be caught and deported.

The perception is that when a raid follows a count, there is some connection between those, and I am sure you share that concern. Can you tell me if there has been a similar policy adopted for 1990? My understanding is there is not, but I would like to know.

Mr. **Darby**. We have been told that residential block sweeps were discontinued in 1980 and remain discontinued now. We have spoken to the INS; the previous Census Bureau director met with the INS. And we have continued to try and make them aware of our concerns. I understand that another committee had a hearing this morning to discuss these matters.

Ms. **Bryant**. The INS has just issued guidelines to all of its offices.

Mr. **Kolbe**. You have seen those guidelines?

Ms. **Bryant**. Yes. The guidelines do three things for the census. First of all, they reinforce that the residential sweeps that were discontinued in 1980 remain discontinued. Second, they put a moratorium on enforcement publicity between February and May. And third, they ask all of their people to be sensitive about the importance of taking a full census count.

Now the INS has its mission, and obviously it is not going to back off on it completely. So they will continue their employer enforcement, which apparently is the major modus operandi now. But they have conceded and issued these three guidelines on the policy for the census.

Mr. **Kolbe**. Do you view the substance of these guidelines as satisfactory, or had you hoped for more?

Mr. **Darby**. We are always hopeful that the INS will move with care and discretion, and we remain hopeful.

Mr. **Kolbe**. That sounds like a politician talking.

Mr. **Darby**. I thought I was a professor.

Mr. **Kolbe**. For somebody who is a professor, you sound like a pretty good politician. [Laughter.]

I am not sure I understood exactly whether———

Mr. **Rogers**. Will you yield?

Mr. **Kolbe**. I absolutely yield.

Mr. **Rogers**. Have you ever heard an economist equivocate like that?

Mr. **Kolbe**. No, I have not.

I will read into that what I choose, I guess, in terms of that answer.

Mr. Chairman, I have no further questions.

COTTON GINNING

Mr. **Smith**. You mentioned something about discontinuing the statistics program on cotton ginning?

Mr. **Darby**. Yes, sir.

Mr. **Smith**. Is not that required by law?

Mr. **Darby**. We are proposing alterations. We are proposing, part of this proposal, we also come forward with a proposal to amend———

Mr. **Smith**. Both are to repeal the law—to take that out?

Mr. **Darby**. Yes, amend Title 13, yes, sir.

Mr. **Smith**. Well, what is the timetable? What if it is not repealed by that time? The law says you have to go ahead.

Mr. **Bellomo**. I am not a lawyer, sir. But, we do have other provisions in Title 13, such as the mid-decade census, which says the Secretary shall perform the activity. But we do not have funds for that either. So I am not sure that it is necessary to repeal the law.

Mr. **Smith**. What are these others?

Mr. **Bellomo**. The mid-decade census is one for sure.

Mr. **Smith**. Well, that is not a constitutionally required census, though.

Mr. **Bellomo**. No, sir, it is not. But it is under Title 13, as is cotton ginning.

Mr. **Smith**. I see, okay.

Mr. **Bellomo**. It is the same title.

Mr. Smith. Yes, both of them would be.

Mr. Kolbe. Mr. Chairman, would you yield?

Mr. Smith. Yes.

Mr. Kolbe. This is new to me. I did not understand. Why are you proposing to discontinue this?

Mr. Darby. We recognize that money is very tight, and there is a great pressure on funds, and we are trying to improve the higher priority——

Mr. Kolbe. Let me interrupt you. Is this the only agricultural statistic you are——

Mr. Darby. This is about the only agricultural statistics, other than the agricultural census, still maintained by the Census Bureau. Most agricultural census or agricultural statistics are produced by the Department of Agriculture.

Mr. Kolbe. Is it duplicative of what is done by the Department of Agriculture or not? In other words, are we just abandoning this altogether? There will be no cotton statistics, is that correct?

Mr. Darby. Well no, we would still have cotton statistics in the agriculture census—this is on how many bales are ginned at cotton gins.

Mr. Kolbe. Why in the world is that done by the Census Bureau as opposed to the Department of Agriculture? Is this the only agricultural statistic that you maintain?

Ms. Bryant. No, we do the every five year agriculture census.

Mr. Darby. But other than that——

Mr. Kolbe. This is on a yearly basis?

Mr. Darby. Yes.

Mr. Kolbe. And normally those yearly statistics——

Mr. Darby. Are done by Agriculture.

Mr. Kolbe. Meat production, so forth, is done by——

Ms. Bryant. Agriculture.

Mr. Darby. Apparently it is a historical accident that is still with us instead of them.

Mr. Kolbe. Have you had discussions with the Department of Agriculture about them picking up this responsibility? I would think cotton ginning statistics would be fairly important, the number of bales.

Mr. Darby. They are aware that we are proposing to discontinue it. I presume that they would take appropriate action within their budget total.

Mr. Kolbe. You might want to check on that. I am not an expert on this, but I do have a lot of cotton production in my district, and I would assume that ginning statistics on bales of cotton would be vital to commodities markets.

Mr. Darby. I believe that there are separate crop data that serve their purpose—this is on exactly where it gets ginned.

Mr. Kolbe. Where does it get ginned? All right, thank you very much, Mr. Chairman.

1992 CENSUS OF AGRICULTURE

Mr. Smith. What is the timetable now on the next agricultural census?

Mr. Darby. That would be 1992.

Ms. Bryant. It will be 1992. The reports on the 1987 one are now out.

Mr. Smith. What is the timetable for preparing for it and so forth?

Ms. Bryant. The economic censuses are on a six-year budgeting cycle. This is year two. So all of the planning is in this budget.

Mr. Smith. The planning money is in this budget?

Ms. Bryant. Yes.

Mr. Smith. And then what will be in next year's budget?

Ms. Bryant. Well I mean, it is sort of a build-up until you actually take it in 1992.

Mr. Smith. In 1992.

Ms. Bryant. So this is the second year of the six-year cycle on both the economic and agriculture censuses.

Mr. Smith. What have you done to be sure this one is more accurate than previous ones? Have you made any changes?

Ms. Bryant. Well that is, of course, what planning money is for. I mean, we are just really in the early stages now of planning for '92; so the funds that are in this budget would be—the census always is rather research-driven. But after each type of census, we do evaluation and try to improve the next one. And that would be occurring in agriculture and business, as well as, what we are trying to do in the 1990 census compared to what we did in the 1980 census.

Mr. Smith. This is the one that we have had a lot of complaints about, this agricultural census. You may or may not know—how long have you been with the Census Bureau?

Ms. Bryant. I was appointed by President Bush on December 7th. I was down there as a consultant for several months before that.

Mr. Smith. Well I think it was in the 1972 census that—was there an agricultural census in '72?

Ms. Bryant. Yes—in years ending in 2 and 7.

Mr. Smith. They missed seven million head of cattle.

Ms. Bryant. May I call on my deputy to——

Mr. Smith. Yes.

Mr. Kincannon. The spare team is here in case——[Laughter.]

As I recall, this is an occasional dialogue. And there was a discrepancy covering the 1972 census between figures from the Census Bureau and another source, a State source, I believe. I do not recall without going back to that. And I believe, in fact, that we were able to demonstrate that our figures were substantially correct and the other figures were either by definition different or omitted some class that we had included or included some class that we had excluded.

And I would be glad to submit that information to you.

[The information follows:]

Undercount of Cattle

The issue of the "missed cattle" was first raised in the House Subcommittee on Census and Population hearings on June 22 and 23, 1976. The hearings were held for presentation of testimony concerning proposed legislation (H.R. 12397) which would give responsibility for the conduct of agriculture censuses to the Statistical Reporting Service (SRS) of the Department of Agriculture (USDA).

Congressman Neal Smith (Iowa) stated in his testimony in support of the proposed legislation that "according to an analysis made by the Office of Technology Assessment by Harry C. Trelogan, former head of the Statistical Reporting Service of the USDA, the 1969 census failed to count about 8.5 million head of cattle located on 290,000 farms." The number of cattle missed was estimated to be 5.8 million (5.2 percent), not 8.5 million. It is not known how the apparent transposition error occurred.

The 1969 Census of Agriculture showed 106.3 million cattle reported on farms as of December 31, 1969. Based on the coverage evaluation study conducted by the Bureau as part of the 1969 census, the total inventory should have been 112.2 million—an estimated undercount of 5.8 million cattle. The cattle missed in the census were on farms not counted due to incomplete mail lists. The USDA's estimate for January 1, 1970 was 112.3 million.

Congressman Smith's remark concerning the missed cattle was one of several congressional criticisms concerning coverage of mail-out censuses. These criticisms ultimately led to the inclusion of an area sample survey in the 1978 Census of Agriculture to supplement the mail list and to improve coverage of farms.

Mr. SMITH. Well, as I understand, the farmers thought that you were wrong. They made the wrong plans based on your statistics. Are you really, on this agricultural census, trying to take past history and improve?

Ms. BRYANT. Would you like us to prepare a position paper for you on that?

Mr. SMITH. I think you should, because if they are not better than they had been in the past, I think we would be better off to give it to a scientific sampler; I really do.

Ms. BRYANT. Let me get information back to you on how we are interpreting that.

Mr. SMITH. Yes.

Mr. KINCANNON. We will certainly do that. But I would like to comment that the level of complaints from farmers about the 1987 census was substantially lower than the level of complaints about the 1982. We did make some progress in that area.

[Additional information follows:]

QUALITY AND TIMELINESS IMPROVEMENTS IN THE CENSUS OF AGRICULTURE SINCE 1974

As the chart shows, the timeliness of the census publications has improved dramatically since the 1974 Census of Agriculture. The data are now released more than a year sooner than in 1974.

MONTHS FROM START OF DATA COLLECTION TO PUBLICATION OF STATE BOOKS

Census Year	First	Last
1974	28	33
1987	13	20

Quality improvements, although harder to measure and objectively express, have also been made. Notable improvements in several areas include:

RESPONSE BURDEN

Constituent letters from the Congress were cut in half from 1982 to 1987 and were only about 5 percent of the letters received in 1974.

Form length was cut from a standard 20-page booklet in 1974 to a standard 4-page, easy-to-use form in 1987. Some farm operators received only a 2-page form in 1987.

Through the use of sampling, only about 20 percent of the farm operators received the census long form. No sampling was used in 1974.

Census contacts with the mail list universe were cut from 6.5 million in 1982 to 4.1 million in 1987.

AUTOMATION

Interactive computer editing and problem resolution of census forms.

Interactive computer review and research of state and county totals.

Interactive computer searching of name and address matches.

STATISTICAL METHODOLOGY

Mail List Development—Used a precensus identification survey to eliminate nonfarms and duplicates from the 1978 and 1982 mail lists. Modeled mail list variables that predicted the probability of farm status and thus used an objective methodology for the elimination of nonfarms from the census lists in lieu of the precensus identification survey.

Conducted a pilot project using state lists of farms to improve coverage of small and specialty operations. Expanded list enhancement program of incorporating specialty lists from cooperatives, contractors, poultry producers, citrus growers, etc.

Conducted methodological research into computerized matching for mail list unduplication.

Data Collection Research—Tested mail out procedures and materials. Increased precensus testing of form design and content, including extensive work and communication with farmers.

Research into methods for increasing early response to the census resulted in 1987 response being nearly 17 percentage points ahead, at one point, of the 1982 response pattern.

Sample Design and Estimation—Improved sample and nonresponse weighting procedures resulting in reductions in variability of estimates.

Provided estimates of sampling error for many more data items in census publications.

Coverage Improvement and Evaluation—Conducted area sample in 1978 to dramatically improve the coverage of all farms, especially small farms.

In lieu of unfunded area sample in 1987, provided state-level coverage evaluation estimates of farms not on the mail list with the state publication as opposed to regional-level estimates in the less timely coverage evaluation report.

OUTREACH AND DISSEMINATION

Leading edge research into data dissemination via electronic modes such as CD-ROM and bulletin boards.

Early release of limited final data rather than preliminary data subject to change.

Use of regionalized forms which better focus the respondent on the crops that are specific to his/her region.

PUBLICATIONS AND DATA

Improved presentation of data through new publications such as Government Payments and Market Value of Agricultural Products Sold, ZIP Code Tabulations, and Agricultural Atlas of the United States.

Refocusing of data collection effforts in the area of irrigation by eliminating data from irrigation organizations and using the resources to collect more data on irrigation practices used by farm operators.

Mr. **Smith**. Yes, thank you.

Are there any more questions?

Mr. **Rogers**. No.

Mr. **Smith**. Thank you all for being here.

Mr. **Darby**. Thank you very much, Mr. Chairman.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

1990 Census

Vacant/Delete Check

QUESTION:

If the mail response rate is not better than anticipated and the Department is unable to obtain the emergency supplemental appropriation, how will you be able to do the vacant/delete check?

ANSWER:

If the mail return rate is not better than anticipated, and there are insufficient cost savings in other areas, we would conduct the vacant/delete check and then continue only vital census operations until the end of FY 1990. Effectively, we would close down all operations except those related to producing apportionment and redistricting counts, protecting facilities and materials, and conducting the Post Enumeration Survey.

QUESTION:

How much could be saved if the Bureau did the vacant/delete check on a sample basis, as was done in the 1970 Census?

a. What would be the consequences of doing a sample?

b. Would such a sampling be permissible under current law?

ANSWER:

a. We will conduct the vacant/delete check on a 100-percent basis originally planned in order to provide accurate counts and data for small geographic areas. One of the unique characteristics of a census, as opposed to a sample survey, is that a census is designed to produce accurate data for small areas. The majority of the 39,000 governmental units in the U.S. are small: about 80 percent have fewer than 5,000 people. By conducting this recheck on a 100 percent basis we will be providing data with a level of accuracy consistent with other census data collection activities, and consistent with our goal to improve accuracy for geographic areas and population subgroups.

b. The Department has in the past had legal concerns about conducting the vacant/delete check on a sample basis. In 1970, a sample vacant/delete check was adopted as an emergency measure. In 1980, a full vacant/delete check was conducted. The decision to undertake a full check in 1980 was based in part on the recognition that sampling appeared to be inconsistent with Section 195 of United States Code Title 13. Nonetheless, the decision to conduct a full check in the 1990 Census was based on the considerations outlined above.

Counting Americans Overseas

QUESTION:

What is the cost of counting overseas members of the armed forces, civilian DoD employees, and their dependents in the 1990 population counts used for apportionment?

ANSWER:

We are planning, for the purposes of Congressional apportionment, to include overseas U.S. military and Federal civilian personnel and their dependents stationed with them. A total cost estimate is not available because most information will be gathered from administrative records and all work will be absorbed by the reporting departments and agencies. Work required at the Census Bureau will be carried out by existing staff.

QUESTION:

Is the cost of this item funded in the Bureau's appropriation or in DoD appropriations?

ANSWER:

The cost of incorporating data provided by the agencies into the apportionment counts is minimal, and is included in the Census Bureau's appropriation. The cost of providing these data would be funded by the DoD or other agencies providing the information.

QUESTION:

Why aren't you counting other citizens residing abroad for the purpose of apportionment?

ANSWER:

In response to widespread bipartisan congressional support, we decided to include Federal overseas personnel, both military and civilian, and their dependents, in the 1990 counts used for apportionment. We took similar action in the 1970 census when the Congress expressed interest in including in the apportionment counts the unprecedentedly large number of Americans living abroad. Many of these persons consider the U. S. to be their usual place of residence.

In addition, inclusion of Federal overseas personnel is possible because of the ease with which we can acquire information from Federal administrative records. These records officially document the existence of such persons, and record a state of residence for them. Equivalent information for other Americans overseas, who are private citizens, that would allow us to include them in the apportionment count, is not available, even for those employed by U.S. companies, and such information would be difficult to collect accurately.

Post-Enumeration Survey

QUESTION:

What were the terms of the Settlement Agreement with the State of New York in its suit to produce adjusted population counts?

ANSWER:

We have attached a copy of the Settlement Agreement.

QUESTION:

You are requesting $32.4 million in FY 1991 for statistical research and evaluation. How much of this amount will be allocated to the Post-Enumeration Survey and other efforts needed to made a decision on adjusting the counts from the 1990 Census?

ANSWER:

$20 million is included for the implementation of the Post Enumeration Survey.

QUESTION:

Would the Bureau reduce its efforts on coverage evaluation if the Department decides not to adjust the counts?

ANSWER:

No, we would not reduce coverage evaluation efforts.

QUESTION:

How much do you estimate will be saved from following up on only one in ten mail return short forms that fail edit for content purposes and by eliminating editing of questionnaires obtained by enumerators?

ANSWER:

The changes made to our questionnaire edit follow-up plans save a total of about $36 million.

QUESTION:

Will these actions impair a possible adjustment of Census counts?

ANSWER:

No.

Use of Automation

QUESTION:

In your justifications you state that one of the major improvements for the 1990 Census has been the increased use of automation. What action have you taken to insure the reliability of the information in your management information system?

ANSWER:

Completeness, validity, consistency, and reasonableness checks are an integral part of the capture of Management Information System (MIS) cost and progress data. In the district offices (DOs), the Payroll Form 308 is the daily record of worker progress and hours worked. These forms are manually reviewed before keying, and 100 percent verification is performed on the keying of the data into the computer. The computer checks for invalid entries or employee identification numbers as the data are entered. After the data are transmitted to the Regional

Census Centers (RCCs), computers perform further edits for consistency and tolerance tests to determine if the data are within expected ranges for specific types of job categories and expected production rates by operation. RCC managers review reports produced and if any data are missing or seem suspect the transmitting DO is contacted and asked to recreate and retransmit the data.

In the processing offices (POs), all progress and production rate data for keying operations are automatically calculated by computer as the Computer Assisted Tracking System (CATS) accumulates information on-line as the operation is ongoing. For clerical processing operations, all batches of forms coming into or going out of various work units are tracked by entering the batch number into a computer terminal at that work unit. So at any point in time CATS can pinpoint the location of a batch of forms and can provide accurate up-to-date reports on the progress of any operation.

For cost information in the POs, estimates are produced by computer for each operation weekly based on the number of hires working at various types of jobs during a given week. The current number of hires on board are part of the Personnel and Administrative Management System (PAMS), which are keyed from personnel forms after the forms have been clerically reviewed, and the keying is verified for accuracy. An internal audit of the payroll information is conducted and the information is verified against authorized position titles and operation codes.

When data are transmitted from the RCCs and POs over high speed data lines, any transmission errors that may occur are automatically detected by electronic line monitors that acknowledge the loss of a block of data, and that block of data is automatically retransmitted. At headquarters, software in the MIS edits all the transmissions to determine that the correct identification codes by office site are in place and recalculation of totals and percents in reports are performed to verify that the data received in the MIS data base are the same data that were transmitted from the field offices.

Teams of analysts at headquarters study each updated report looking for anomalies in cumulative progress or cost in an operation from one day to the next, or looking for offices not reporting. When data do not look reasonable, inquiries are made to the managers of the offices that transmitted the data for resolution.

QUESTION:

Does your management information system have enough capacity to process all the data required on time?

ANSWER:

All field office and processing office computers have been sized based on dress rehearsal experience to accommodate the necessary processing and transmission of MIS cost and progress data, as well as payroll and recruitment data at specified time intervals, whether it be weekly or daily. At headquarters we currently have sufficient capacity, and backup capacity in case of hardware failure or disaster, to produce the required management reports to control peak census activities.

QUESTION:

Will the Bureau need to purchase additional capacity or borrow it from other agencies, and if so, at what cost?

ANSWER:

Recently the Bureau brought on line an offsite processing facility in Charlotte, NC, which will serve, in part, as backup capacity to the decennial for both UNISYS and DEC computer processing. The Charlotte facility will also be used for production of geographic products and other geographic processing activities in support of the decennial census. In addition, the decennial applicant name check system and the internal decennial budget formulation system were recently relocated from the headquarters computing facility to the BETA Test Site facility in Baltimore, where there is available capacity. This move prepares the headquarters computers to receive and process the peak MIS data in a timely manner.

Unemployment Benefits

QUESTION:

You are requesting $4.4 million for unemployment benefits for FY 1991; for FY 1990 you requested about $71.5 million for unemployment benefits. What is the reason for this major difference in the cost of this item for FY 1991?

ANSWER:

We budgeted for unemployment compensation claims that will be filed by the large temporary work force hired in FY 1990 to conduct the 1990 Census enumeration. The decrease reflects the 96 percent decrease in temporary staff between FY 1990 and FY 1991, as a result of completing the majority of field enumeration activities in FY 1990.

QUESTION:

Won't a significant number of temporary workers receive unemployment benefits in FY 1991?

ANSWER:

It is difficult to predict precisely when census workers will receive unemployment benefits. However, the peak census staff of 285,000 workers occurs in May 1990, and the Census Bureau would be liable for a large number of claims at the time these workers are released. Our budget estimates are based on anticipated peak staff levels and the percentage of staff expected to apply for and receive benefits based on national averages and some limited historical information from the 1980 census and 1990 test censuses. This information and methodology lead us to budget most of the unemployment compensation costs in FY 1990.

Promotion and Outreach

QUESTION:

What portion of the $5.3 million requested in FY 1991 for promotion and outreach will be allocated to the Census Community Awareness Program?

ANSWER:

$2.9 million is for the Census Community Awareness and Products Program.

QUESTION:

How many community awareness specialists will be retained during FY 1991?

ANSWER:

We plan to have 105 community awareness specialists in FY 1991 to complete the following activities:

- Contacting community-based organizations to thank them for their assistance during the 1990 census;
- Conducting data work shops for community-based organizations, religious organizations and schools;
- Attending meetings and conferences and responding to inquiries regarding access to and use of census data products, the schedule for release of 1990 census products, and the like;
- Assisting regional geographers with redistricting issues.

QUESTION:

What other kinds of activities will be funded under Promotion and Outreach?

ANSWER:

In addition to the activities described above, the Census Bureau will complete evaluation of its 1990 School Project; complete the "Thank You America" campaign to acknowledge those parties outside the Bureau who provided support for the 1990 census; and participate in workshops, conferences and other forums to inform and assist the public in accessing and using various data products at the national and local levels.

Salaries and Expenses

Foreign Trade Statistics

QUESTION:

You are requesting an increase of $500,000 and 13 positions to improve foreign trade statistics. The justification for this request is a suspicion that a significant undercount of exports exists and that there is a need for a program to improve the quality of foreign trade data. What is the magnitude of the suspected undercount?

ANSWER:

Based on initial audits of export operations at four major airports we estimate the value of export shipments by air missed in 1988 to be in the range of 5-10%, approximately $5 to $9 billion.

For 1988, if we assume the same export shipment ratio for the remainder of the export trade (i.e. for vessel shipments and for truck/rail shipments to Mexico), then the additional undercount could be in the range of $12 to $25 billion. The trade deficit for 1988 could then be less than $100.0 billion rather than $118.0 billion as recorded.

QUESTION:

What is the estimated effect of undervaluation and misreporting of exports on the quality of foreign trade statistics in the monthly balance of trade reports?

ANSWER:

If the above estimated undercount were applied to the latest monthly trade deficit (December 1989), the $7.0 billion deficit could be lowered by $1-2 billion.

Our experience with the undercount of exports to Canada, for example, has shown that the level of undercount varies from month-to-month. This variation could have a significant effect on the month-to-month changes in the trade balance.

QUESTION:

How do you plan to address these problems with the requested increase for FY 1991?

ANSWER:

The requested funding will be used to conduct more exhaustive follow up to the initial air audits and to conduct initial audits of major seaports and at Mexican border crossings. The results of these audits will be the primary source of information to help us determine where regulatory changes will benefit coverage and for extensive educational efforts in the exporting community. The results also will provide the U.S. Customs Service with information on where to place its limited resources for more accurate collection of export documentation and for enforcement of controlled merchandise leaving the United States.

Demographic Surveys

QUESTION:

You are requesting an increase of $2,826,000 and 49 positions to modernize the Current Population Survey

Processing System and begin restoration of the Survey of Income and Program Participation. How are you going to modernize the Current Population Survey and Processing System and how much of an improvement will the request provide for the SIPP?

ANSWER:

We will modernize the CPS processing system by redesigning it to reflect present day computer hardware and software technology. We will automate the clerical operations that have remained in the system since its last major overhaul in the 1960s; utilize micro- and minicomputers to improve processing efficiency and flexibility; improve the interface of the system with the computer-assisted interviewing procedures that we will be using in the 1990s; and develop data products that are more compatible with the computer analysis techniques that analysts in the public and private sectors are now using. The overall goal of the modernization is to develop a more efficient processing system that will permit more in-depth use of the CPS data for policy formulation and evaluation.

Regarding SIPP, our fiscal year 1991 request will permit the first step in the sample restoration process that will return the SIPP to its original design of overlapping panels of 20,000 households. The panel introduced in 1991 will have 14,000 households. Adding these households to the restructured 1990 panel of 21,500 households will improve the reliability of intrayear estimates of people moving into and out of poverty and the characteristics of people who become eligible for government assistance programs by about 13 percent. The sample restoration also will allow the Census Bureau to detect an 18 percent smaller change in the survey's cross-sectional estimates, for example, a change in the number of households who are receiving food stamps.

Finally, this increase will permit the Census Bureau to extend a panel's duration to eight interviews per household, thus increasing our ability to analyze changes in households' and persons' economic situations over time. For example, it will broaden the window for observing changes in family income that are related to significant demographic events such as births, divorce, widow(er)hood, and so forth.

Business Statistics

QUESTION:

In the Business Statistics Program you are requesting an increase of $3,910,000 and 91 positions. What specific programs would these funds be allocated for, and how do you plan to improve the quality of data in these areas?

ANSWER:

Improvements to Advance Retail Sales Estimates ($1,069,000).

This program increase will fund the research, identification, and other actions necessary to provide more accurate advance retail sales estimates data. Results of this program are published on the 9th working day following the month of reference -- an extremely timely economic indicator.

While sampling error is well controlled, non-sampling errors can be lowered, which will provide a higher degree of precision of the estimates.

Research activities will address non-sampling error as a result of non-response, early collection of the data, non-standard reporting by respondents and adjustments applied to the data during processing.

Improved Measurements of Services Purchased by Industry ($523,000).

This initiative will collect new data on legal, accounting, and other services purchased by industry, and will provide a more comprehensive set of statistics on the costs of doing business and, in manufacturing, provide a more accurate measure of value added by industry. These data are essential for improving the annual input-output tables and the derivative gross national product accounts.

Detail Data for More Service Industries ($1,050,000).

This initiative will publish annual detailed measures of industry output, payroll and other expenditures for personal, business, travel and recreation, and health and social service industries. At present, data for these industries are limited to a single measure, total operating receipts.

In addition we are requesting $400,000 to identify and measure newly emerging growth industries, mainly in the rapidly growing service sector.

Both initiatives will provide necessary input-output data for more accurate calculations of national income and product accounts, benchmark, and annual input-output tables. They are crucial for development of more precise GNP calculations. BLS needs these data for input to their Producer Price Indices and for developing productivity measures.

Small Company Financial Data ($418,000).

This initiative will improve the precision of published estimates and restore to previous levels the sample of small companies that currently are not represented in the Quarterly Financial Report (QFR) program.

Improvements in the quality and availability of key financial performance indicators, such as profitability and debt structure, for the small business sector will be accomplished by adopting new methodologies developed in prior years but not implemented due to lack of funding, and by restoring the QFR small company samples in mining and trade which, in turn, will allow for publication by size in those sectors. Currently, the official corporate profits data for wholesale and retail trade are no longer representative of small companies because of sample size reductions made over the last decade. These two sectors are heavily populated by small firms and the inclusion of these companies will significantly improve the quality of data used in economic policy making.

Expanded Corporate Financial Data ($450,000).

This initiative will fund an expansion of the Quarterly Financial Report (QFR) program to provide comprehensive financial information for the services sector on a comparable basis to that currently being published for the manufacturing, mining, and trade sectors.

This expansion will satisfy the increasing demands made by the Congress and Administration for reliable services data. Key measures of financial well being such as profitability, indebtedness, investments, and equity are not available on a current basis from any Federal agency.

QUESTION:

Please give us some specific examples of the problems that have arisen because of the failure to improve the quality of data in these various areas in the past.

ANSWER:

Improvements to Advance Retail Sales Estimates

The timely U.S.-level estimates constructed from early reported data in the advance survey differ from the later preliminary and final estimates. While sampling variability accounts for some of these differences, various nonsampling errors are believed to be accounting for most of the differences. A specific example illustrates this: Month-to-month change for May 1989 (compared to April 1989) was estimated in the advance survey as +0.1 percent. The final estimate from the later, full-sample monthly retail survey was +0.8 percent. Such errors in the initial estimates can mislead policy-makers. We expect results of the research to benefit not only the advance retail survey, but also the full-sample monthly retail survey as well as other economic surveys.

Services Purchased by Manufacturers

The basic source of information about the growth or decline of individual business sectors is the gross national product (GNP) accounts, which are dependent on the economic censuses data and related annual programs compiled at the Census Bureau. From 1950 to 1986, the GNP estimates showed that manufacturing's contribution was remarkably stable at roughly 20 to 22 percent in constant 1982 dollars; however these estimates do not fully reflect the growing trends for many manufacturing firms to purchase legal, bookkeeping, and other services from outside suppliers rather than performing these activities "in-house." Only limited data on these purchased services by industry are collected by the Census Bureau.

Detailed Services Industry Data and Data on Emerging Industries

Structural changes and technological innovation have had a profound effect on the Nation's economy. Unfortunately, our statistical system has not kept pace. Service industries are changing faster than our ability to identify, classify, and measure them. There are currently insufficient supporting data to provide insights as to why or how changes are occurring in important services. In the health care industry, there are constant changes in the delivery patterns for medical services (new technologies/ insurance payments); automotive lease and rental options radically affect buying patterns (changing tax laws); and, the demand for better information on social services such as job training and child day care (business and life style changes) continues to impact economic measures.

Without these new data, our national understanding of growth, prices, and changes in demand within these industries is handicapped. Development of price indices and productivity measures are less precise due to a lack of detailed receipts and expenditure data. The BLS needs these expanded data to improve the quality of their Producer Price Indices. And, these more complete data are important for BEA's improvement of National Income and Products Accounts estimates and their annual input-output tables.

Small Company Financial Data

The plan for these improvements originated with a request in 1985 by the House Committee on Small Business for special tabulations of QFR data. Add-ons to the QFR budget were provided at Congress' initiative in 1985 and 1986 to develop a plan to remedy the problem, but funding for implementation did not occur. This request is the outgrowth of that work and addresses not only the shortcomings identified by the committee but the needs of BEA for improvements in GNP estimation.

Expanded Corporate Financial Data

Currently the Bureau of Economic Analysis (BEA) must rely on its own small sample and seriously lagged Internal Revenue Service (IRS) data to develop estimates of service sector profits for current years. There is no current indicator available to BEA for gauging quarterly movement. The problem caused by this lack of complete and timely data was seen clearly in BEA's underestimate of services sector profitability growth from 1985 to 1986. Their estimates showed an increase from $13.4 billion in 1985 to $14.7 billion in 1986, or 9.7 percent. Data recently released by IRS for 1986 show services corporate profits at $18.2 billion, an increase of 35.8 percent, nearly 4 times greater than BEA's estimates.

Manufacturing Statistics

QUESTION:

In the Manufacturing Statistics Program you are requesting an increase of $2,450,000 and 57 positions. What specific programs would these funds be allocated for, and how do you plan to improve the quality of data in these areas?

ANSWER:

The funds will be used to initiate a new annual investment survey ($2,000,000) and to improve the reliability of statistics published from the Manufacturers' Shipments, Inventories, and Orders (M3) survey ($900,000). We will eliminate selected Current Industrial Reports (-$450,000) to offset some of the funds needed for these two initiatives. Data collected in the annual investment survey will provide additional details that are critical in analyzing productivity growth and the ability of U.S. businesses to compete with foreign producers. The survey will be based on a probability sample drawn from a frame of all nonfarm businesses so that statistical reliability of the estimates can be measured. Also, the results of the survey will provide annual benchmark data for the estimates from the quarterly Plant and Equipment Expenditures Survey that have been subject to large revisions.

Funds for the M3 will allow improvements in the quality and quantity of responses to the survey. Both will improve the quality of data. We will increase direct contact with large company officials to get better overall response which, in turn, will allow for the publication of greater industry detail. We will implement a probability sample; introduce rotating samples to minimize reporting burden; and utilize other sampling techniques to provide accurate estimates of the statistical reliability of the data.

QUESTION:

Please give us some specific examples of the problems that have arisen because of the failure to improve the quality of data in these various areas in the past.

ANSWER:

The accuracy of the Government's only statistical estimate of planned business investment for 1990 is questionable. This hinders policymakers' ability to make decisions on savings, investment, and other economic policies. The accuracy is questionable because the survey that provides the estimate of planned investment indicates that actual investment grew 10.3 percent from 1988 to 1989 while the national income and product accounts indicate that actual investment only grew 5.0 percent during the same period.

Lack of more frequent benchmarking in the area of investment has caused serious revision problems and, more importantly, probably poor investment decisions in the past.

As further evidence for the need for improvements in the area of investment data, the Economic Policy Council's Working Group on the Quality of Economic Statistics made a specific recommendation to initiate an annual survey of investments.

For example, in 1980 the Government's statistical picture of historical investment in the United States was substantially altered when data series on actual investment were benchmarked to improve their accuracy. An important reason for the magnitude of the almost 20% revision was the 10-year lapse since the previous benchmark. Past tax, investment, and other economic policy decisions may have been misdirected since the revisions were so large.

Data from the Manufacturers' Shipments, Inventories, and Orders survey are key indicators required for policymakers' current decisions on fiscal and monetary policy. They also provide key investment, marketing, and production information to the private sector. Thus, the accuracy of these data are critical for sound economic decisions.

General Economic Statistics

QUESTION:

You are requesting an increase of $575,000 and four positions in the General Economic Statistics Program; a portion of this increase is to finance the National Trade Data Bank required by the Omnibus Trade and Competitiveness Act of 1988. What is the Bureau's role in the National Trade Data Bank?

ANSWER:

The portion of the increase that is for the National Trade Data Bank is to cover a training program for state development agencies and Federal depository libraries and to develop the software for the addition of data from international organizations such as the United Nations, the IMF and the World Bank. The new total for the NTDB is still modest for a project of its size and impact.

Ranking of Program Increases

QUESTION:

All of the program increases for Salaries and Expenses Account total $9,978,000 and 201 positions; those are large increases. What are your priorities?

ANSWER:

We have categorized our program increases for the Salaries and Expenses Account into three categories: "A, B, and C" with "A" being our top priority. The priority list is as follows:

CATEGORY A--	Perm. Pos.	Dollars (000's)
Increased funds to develop additional data sources for National Trade Data Bank.........	0	$ 200
Modernization of current population survey (CPS) processing system...............	19	926
Restoration of survey of income and program participation (SIPP)........................	34	2,000
Subtotal "A"	53	3,126
CATEGORY B--		
Investment survey.................	43	2,000
Manufacturers' Shipments, Inventories and Orders (M3) Survey..........................	24	900
Improve Foreign Trade Statistics..	13	500
Subtotal "B"	80	3,400

	Perm. Pos.	Dollars (000's)
CATEGORY C--		
Improvements to advance retail sales estimates	19	1,069
Improved and expanded service statistics	72	2,841
Standard industrial classification (SIC) research	4	375
Metropolitan statistical area	1	250
Subtotal "C"	96	4,535
Total Program Increases	229	11,061
Total Program Decreases	(28)	(1,083)
TOTAL PROGRAM CHANGES	201	9,978

2000 Census

QUESTION:

You are requesting an increase of $747,000 and 11 positions for preparation and planning, including research and development for the Year 2000 Decennial Census. What innovative techniques are you considering for the 2000 Census?

ANSWER:

We are looking for innovative changes to improve the cost, quality and timeliness of future censuses. Some possibilities for consideration include:

- operational changes: eliminating, limiting or revising the schedule of operations
- the field management and data processing office structure
- the use of new technologies and automated equipment and its distribution throughout the office structure
- the maintenance and updating of the address list by innovative methods and on a more regular basis throughout the decade

- the design of better questionnaires and mailing packages, with attempts to design effective procedures for problematic subpopulations
- the use of different residence rules, forms and list matching techniques to improve coverage
- the use of matrix sampling or alternative sampling rates for estimates of characteristics, and
- the use of multiple reminder cards or mailings to nonrespondents for mailed forms.

QUESTION:

I understand that these funds will be used to begin planning for field tests in 1993. Will you have sufficient time to complete an analysis of innovative techniques in time for a test in 1993?

ANSWER:

Of the $747,000 about $250,000 would be used to begin planning for 1993 field tests of new census content, methods, technologies and field office structures. Initial analysis of innovative techniques is underway through the current work of the 21st Century Decennial Census Planning Staff and the Research, Evaluation and Experimentation activities planned as part of the 1990 census. We will have sufficient time and resources to plan appropriate field tests in 1993 if we receive sufficient additional funding in 1991.

QUESTION:

Based upon the lead times required for planning previous decennial censuses, when will the Bureau have to make final decisions on the design for the 2000 Decennial Census?

ANSWER:

The overall schedule for the 1990 Census was motivated by the need to conduct a true dress rehearsal of the 1990 methodology and automated systems in the spring of 1988. In order to plan and prepare for the dress rehearsal, we made most of the major design decisions in the fall of 1986. As a result of procurement and software lead-times and the volume of preparatory work, the implementation schedule contained very little slack or flexibility. Fortunately, we have experienced no serious delays for 1990. However, to reduce the risk and vulnerability of a very tight implementation schedule, we hope to make the major design decisions for the 2000 Census by the spring of 1996. These decisions will include: the data collection methods to be used, the office structure for data collection and processing, and the automated systems design to support all census activities. We must make some earlier decisions in the spring of 1995 about how we will prepare the address lists and geographic data files and materials. The law now requires final determinations on specific topics and questions to be included in the census in 1997 and 1998 respectively.

Geographic Support

QUESTION:

The budget justifications indicate that in FY 1991 the Census Bureau will begin to develop prototype systems to update the automated geographic files using information gathered in consultation with other federal agencies and state governments. How many different prototype systems are being considered?

ANSWER:

The Census Bureau, in planning for the maintenance of the automated cartographic and geographic data base it developed over the past 7 years, hopes to take advantage of the enormous growth in the use of digital cartography and geographic information systems (GIS) by other public and private-sector mapping organizations. The prototype systems we propose to develop are cooperative agreements with outside mapping organizations that involve digital cartographic data transfer and sharing. We already have begun exploratory discussions on potential cooperative agreements with three Federal and three state organizations interested in having and sharing the task of maintaining digital cartographic data bases; these organizations may be excellent sources of up-to-date map feature information that the Census Bureau can incorporate into its automated geographic files in a cost effective manner. To further the likelihood that these prototype systems will succeed and have more general applications as a data base maintenance procedure, we have been participating actively in the national effort to implement a set of standards for the exchange of digital spatial data. This effort, sponsored by the National Institute of Standards and Technology within the Commerce Department, is being implemented technically by the U.S. Geological Survey with whom we maintain a close and cooperative working relationship.

QUESTION:

Does the Census Bureau have any cost estimates for maintaining this system through the 1990s?

a. Have you considered alternatives to maintaining this system, such as using geographic files maintained by other federal agencies?

b. How much of the cost of maintaining the geographic files will be offset by user fees for the products?

ANSWER:

The Census Bureau has made its fiscal year 1991 cost estimate for activities to maintain the automated geographic support system and is developing preliminary cost estimates for those activities that will occur in fiscal years 1992 through 1996. The Census Bureau expects to refine these preliminary cost estimates extensively once we have developed and executed the planned prototype agreements for transferring and sharing digital cartographic data with outside organizations; this approach to system maintenance is technologically and operationally quite different from the more labor intensive techniques used to build the automated geographic support system.

Our discussions to date have not identified any outside geographic file that could itself be used to meet the complex geographic support needs of the Census Bureau. No other Federal Agency has more current nationwide coverage than the Census Bureau, at this time. We are, of course, continuing our cooperative relationship with the U.S. Geological Survey and will continue to exchange digital data with that agency as newer information becomes available.

It is unclear whether the costs to maintain the automated geographic support system will be recovered through user fees. The Census Bureau is currently making extracts of its automated geographic files available to public users, and is recovering only the costs of dissemination that Federal regulations permit, not the costs of developing or maintaining the system.

QUESTION:

The ADP portion of the FY 1991 budget request includes about $2.4 million for support for an automated geographic cartographic production system, which includes maintenance of previously acquired systems. This appears to be the same activity that is described under the Geographic Support budget activity. Why are funds for maintenance requested under two different budget activities?

ANSWER:

The automated geographic support system is composed of the automated cartographic data base itself, the software systems used to modify and use the data base for geographic support applications, and the hardware systems on which the data base is stored and manipulated. The funds associated with the geographic support system in the ADP portion of the FY 1991 budget request are related strictly to the maintenance of the system hardware; the funds in the Geographic Support budget activity are for the development and maintenance of the data base, associated software, and related geographic programs.

QUESTION:

What type of equipment does the Census Bureau need to acquire to provide continuing geographic support for FY 1991?

ANSWER:

The Census Bureau has limited equipment acquisition requirements to meet its commitments for providing geographic support services for FY 1991. We plan to use the funds in excess of those required for hardware maintenance to purchase limited quantities of hardware to support its development of prototype systems for the maintenance of the geographic support data base. The Census Bureau also may purchase some additional data storage capacity.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

THE CITY OF NEW YORK, et al.,
Plaintiffs,
v.
UNITED STATES DEPARTMENT OF COMMERCE, et al.,
Defendants.

88 Civ. 3474 (JMcL)

STIPULATION AND ORDER

WHEREAS the Secretary of Commerce is vested by law with supervisory authority over the Bureau of the Census and the conduct of the Decennial Census and does not by anything said herein intend to relinquish any authority or decision-making power thereby duly vested in him, including without limitation the decision whether or not to adjust the 1990 Decennial Census; and

WHEREAS the Secretary of Commerce intends that the 1990 Decennial Census shall be conducted in conformity with all applicable statutory and constitutional requirements including without limitation 13 U.S.C. § 141(b), (c) and in a manner designed to achieve the most accurate population counts practicable; and

WHEREAS the parties hereto at this time believe that the Census, including a post-enumeration survey and other adjustment-related operations, can and will be conducted in a manner that will result in the most accurate counts practicable, and no party has any basis at this time to believe that the Census, including the PES and adjustment-related operations, cannot and will not be conducted in such a manner; and

WHEREAS the parties wish to avoid the burdens, costs and delays of unnecessary litigation.

NOW, THEREFORE, IT IS HEREBY STIPULATED AND AGREED, by and between the undersigned, that:

1. All pending motions, including plaintiffs' pending Motion for a Preliminary Injunction, are withdrawn.

2. Defendants agree and represent that, notwithstanding the decision by the Department of Commerce (the "Department") announced on October 30, 1987, that there would be no statistical adjustment or correction for undercount or overcount in the 1990 Decennial Census, and without conceding that that decision was incorrect, the decision is vacated, and the question of whether or not to carry out a statistical adjustment of the 1990 Decennial Census ("adjustment") shall be made by a thorough de novo recon-

sideration undertaken with an open mind, without any prejudgment, and consistent with the procedures set forth herein.

3. Defendants agree and undertake to conduct a post-enumeration survey ("PES") of not fewer than 150,000 households, a number defendants believe is sufficient for the purpose, and such other procedures or tests as they deem appropriate, as part of the 1990 Decennial Census in a manner calculated to ensure the possibility of using the PES, not solely for evaluation purposes, but to produce corrected counts usable for congressional and legislative reapportionment, redistricting and all other purposes for which the Bureau of the Census (the "Bureau") publishes data.

4. Defendants agree that the Department will promptly develop and adopt guidelines articulating what defendants believe are the relevant technical and nontechnical statistical and policy grounds for decision on whether to adjust the 1990 Decennial Census population counts. The Department's proposed guidelines shall be published in the Federal Register by December 10, 1989, with a request for comments. The guidelines shall be published in final form in the Federal Register by March 10, 1990.

5. Defendants shall determine whether an adjustment satisfies the guidelines specified in para. 4 hereof.

If the Secretary determines to make an adjustment, defendants shall publish corrected 1990 Decennial Census population data at the earliest practicable date and, in all events, not later than July 15, 1991. If the Secretary determines not to make an adjustment, defendants shall publish at the earliest practicable date and, in all events, not later than July 15, 1991, a detailed statement of its grounds, including a detailed statement of which guidelines identified in para. 4 above were not met and in what respects such guidelines were not met.

6. Defendants intend to report census counts in accordance with the dates set forth in 13 U.S.C. §§ 141(b), (c). In the event that the Department releases or publishes any population counts from the 1990 Decennial Census prior to its determination with respect to adjustment in accordance with para. 5 hereof, defendants agree that each such release or publication shall bear the following legend conspicuously on the first page:

> "The population counts set forth herein are subject to possible correction for undercount or overcount. The United States Department of Commerce is considering whether to correct these counts and will publish corrected counts, if any, not later than July 15, 1991."

7. Defendants shall establish as soon as practicable and, in all events, not later than September 30, 1989, an independent Special Advisory Panel (the "Panel") to

advise the defendants on all matters relevant to the implementation of this Stipulation and, in particular, and without limitation, the guidelines identified in para. 4 above, the application and achievement of the guidelines, the expedition with which defendants are proceeding toward decision on adjustment, and plans and schedules for the implementation of the Census and the PES in a manner that will result in the most accurate final census data at the earliest practicable time. The Panel shall be comprised of eight persons, none of whom shall be employed by any of the parties hereto, of such knowledge, judgment, and probity that their judgment and advice shall be entitled to the utmost respect by defendants. All eight persons shall be appointed by the Secretary of Commerce. The Panel shall have two co-chairs from among their number appointed by the Secretary. Each member of the Panel shall submit his or her recommendations to the Secretary.

8. The members of the Panel shall be entitled to call for and shall receive the fullest cooperation from defendants, including access to all necessary or appropriate information and the opportunity to consult with any employee of the Bureau. Defendants shall take all steps necessary to give each member of the Panel reasonable access to all relevant records and information, including administering appropriate oaths of secrecy pursuant to 13 U.S.C. § 9. The

Panel or any member thereof may make such disclosures, consistent with all applicable statutory requirements, as it or he deems appropriate. The Panel may adopt such rules for its governance as it deems appropriate.

9. The Department shall pay the members of the Panel a stipend of 284.80 $287.50 per day for each day on which the Panel meets and such member is present and shall reimburse the members of the Panel for their reasonable and necessary expenses of travel and lodging in connection with the work of the Panel. The Department shall furnish the Panel with appropriate meeting and office facilities and clerical assistance. The Panel is entitled to retain appropriate assistants who shall be entitled to access to all materials made available to the Panel. Defendants shall make available to the Panel a fund of $500,000 against which each co-chair may draw, consistent with existing laws, rules, and regulations governing the expenditure of appropriated funds, for appropriate resources to ensure that Panel members can perform their mission.

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10. The Panel shall dissolve on agreement of the parties that all of its functions pursuant to this Stipulation have been satisfied.

11. Except as expressly set forth herein, the parties reserve all their respective rights, claims, and defenses. Specifically, and not by way of limitation,

plaintiffs reserve the right to challenge any of the guidelines, decisions, or procedures adopted, omitted, implemented, or announced in connection with or arising out of this Stipulation.

Dated: July 17, 1989

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By: Stephen E. Hart
STEPHEN E. HART

SO ORDERED:

____
U.S.D.J.

July 17, 1989

Corporation Counsel of the
City of New York
100 Church Street
New York, New York 10007

Attn.: Peter L. Zimroth, Esq.

Re: The City of New York, et al. v. United States
Dept. of Commerce, et al., No. 88 Civ 3474 (JMcL)

Dear Sir:

This letter sets out a commitment on behalf of the Secretary of the United States Department of Commerce ("the Secretary") and as part of his obligation under para. 7 of the Stipulation executed today by the parties to the above-captioned litigation.

In para. 7 of the Stipulation, the Secretary agrees to convene a Panel of eight eminent experts (the "Panel"). You shall be entitled to submit to the Secretary, on or before August 15, 1989, the names of seven candidates for membership on the Panel. The Secretary shall select at least four of your candidates to be members of the Panel. Furthermore, the Stipulation calls for two co-chairs to be selected from among the members of the Panel. Once the Secretary appoints the eight members of the Panel, you may nominate one of the two co-chairs, whom the Secretary shall appoint.

All members of the Panel, including those selected from the list of your nominees (and including any Panel members appointed as a result of vacancies), shall undergo normal background checks before they are appointed. In addition, to the extent there is a vacancy on the Panel during its existence, the vacancy shall be filled by the Secretary within two weeks after receiving notice of the vacancy, except that with respect to vacancies of one of your nominees, within two weeks of your sending to the Secretary a list of two proposed replacements, as set forth below. In the event that vacancy occurs with respect to one or more of your nominees, the Secretary shall appoint one of two persons for each such vacancy as proposed by you. If any such vacancy occurs with respect to a co-chair whom you selected, you may, upon appointment by the Secretary of the replacement, nominate a new co-chair, whom the Secretary shall appoint.

This commitment binds the Secretary and any successor and runs in favor of you and any successor.

Sincerely yours,

Michael Darby
Under Secretary for
Economic Affairs
United States Department of Commerce

Questions Submitted by Congressman Carr

FY 1990 Budget

QUESTION:

What was the total cost to the Census Bureau of sequestration?

ANSWER:

The total sequestration to the Bureau was $9,641,000 for FY 1990: Sequestration in the Salaries and Expenses appropriation was $1,398,000; in the Periodic Censuses and Programs appropriation, $8,131,000, of which $7,661,000 was for the Decennial Census; and in Reimbursable Programs, $112,000.

QUESTION:

How has the Census Bureau accommodated the $57 million cut in its budget for fiscal year 1990 and the additional losses through sequestration?

ANSWER:

Our ability to proceed as planned within the currently appropriated amount depends primarily upon the mail response rate, which we shall know in late April. As we have told this Committee before, we had requested a FY 1990 budget that assumed a 70 percent mail response rate (as compared to an actual response rate of 75 percent in 1980.) Given the Congressional budget cut in FY 1990, if the actual rate in 1990 is at or near 70 percent, we may have a budget shortfall. In that case, we will need to look at options to cover the shortfall. If the actual rate approximates our 1980 experience, we hope to be able to proceed within existing funding levels.

The mail response rate is critical because we must visit each housing unit for which a questionnaire is not returned. We estimate that each one percent change in the mail response rate translates into approximately $10 million. However, it is difficult to predict definitively any budget shortfall which might result based solely on the mail response rate. Other factors that may affect the size of any shortfall include keying and enumerator productivity rates, attrition and the size of the census job applicant pool. Of course, other totally unanticipated setbacks, such as natural calamity, may also affect funding needs. We will be in a better position to address our funding situation when the mail response rate is known.

To the extent that we can achieve savings in currently planned operations over the next few weeks without compromising the census, we will make every effort to do so. Assuming existing planning parameters are met and there are no unanticipated setbacks or additional savings achieved, we now expect we may need an actual mail response rate of approximately 75-76 percent. We will monitor carefully the response rate during mid-to-late April and will keep the Committee fully apprised. We understand that supplemental appropriations have been required during past decennial years.

QUESTION:

In response to the $57 million budget cut, Under Secretary Darby informed Congress that the Census Bureau was planning to curtail procedures for editing census questionnaires. How will that change affect the accuracy of the decennial census?

ANSWER:

The Census Bureau considered making the vacant/delete check contingent on the mail response rate. Because of the coverage implications of eliminating the vacant/delete check, we are now committed to proceeding with this operation.

In addition to the $57 million cut, we had some increased requirements and cost absorptions, such as the $7.7 million sequester, increased training costs due to the new minimum wage, and increased rate of attrition for certain field staff. The changes to our edit follow-up plans were made in response to the need to cover these increased requirements and cost absorptions.

As originally planned, we will continue to edit and follow-up on questionnaires that fail edit because there may be additional persons who need to be enumerated and on all long form households that fail edit. We think that these changes will have little or no effect on census coverage. The questionnaires affected by the change in the edit follow-up program have relatively low failure rates with minimal follow-up and correction required. These revisions will reduce quality of the characteristics data and we plan to evaluate these effects.

QUESTION:

Will the budget cuts affect the Census Bureau's ability to meet its payroll obligations?

ANSWER:

The Census Bureau will be able to meet its payroll obligations.

QUESTION:

Have the geographic wage scales solved staffing problems in high-wage areas?

ANSWER:

We did have very positive experience during the 1988 and 1989 operations, where we established higher pay rates in selected areas where we were having difficulty recruiting. In general, these higher rates allowed us to successfully recruit the staff necessary to complete the operations.

The implementation of the full range of geographic wage scales did not occur until FY 1990. That is, we have not yet staffed any major operations in high-wage areas for the census at this point in time. Some of the major operations which require large staffs start in March 1990, leading to our peak staffing level of 285,000 persons in May 1990. Our recruiting program is designed to generate a sufficient number of applicants to meet these staffing requirements.

To date, we have not had any major difficulties in meeting our staffing requirements for the operations that occurred in late January through early February. Recruitment efforts to meet staffing requirements for the larger operations such as nonresponse follow-up, are proceeding on schedule. In general, we believe the geographic wage scales have contributed to our ability to meet our recruiting goals up to this point in time.

QUESTION:

How has the revised federal pay scale affected the budget for the Census Bureau?

ANSWER:

In FY 1990, the Census Bureau absorbed the full cost of the January 1990 pay raise of $1,872,000 in the Salaries and Expenses account and $10,179,000 in the Periodic Censuses and Programs account.

QUESTION:

Under Secretary Darby recently testified that the Census Bureau has "resolved definitely to proceed with the vacant/delete check as originally planned."

a. What is your best estimate of the cost of the vacant/delete program?

b. Has the Census Bureau considered reducing costs by conducting vacant-delete on a sample basis? How does the data from such a sample compare with data from 100% follow-up?

c. Does the Census Bureau see any Constitutional or statutory prohibitions against conducting vacant/delete on a sample basis?

d. How will vacant/delete affect the Bureau's ability to conduct the Post Enumeration Survey and other adjustment-related procedures in a timely manner?

e. Will vacant/delete on a 100% basis interfere with the Census Bureau's ability to provide the data necessary for the Secretary of Commerce to make an informed decision on adjustment by July 15, 1991?

ANSWER:

The vacant/delete operation costs about $64 million. As stated earlier, we are proceeding with the vacant/delete program as originally planned. This program would not affect our ability to conduct necessary adjustment-related activities.

The Department has in the past had legal concerns about conducting the vacant/delete check on a sample basis. In 1970, a sample vacant/delete check was adopted as an emergency measure. In 1980, a full vacant/delete check was conducted. The decision to undertake a full check in 1980 was based in part on the recognition that sampling appeared to be inconsistent with Section 195 of United States Code Title 13. Nonetheless, the decision to conduct a full check in the 1990 Census was based on the considerations outlined above.

(Also see response to related question from Congressman Smith under Vacant/Delete check)

QUESTION:

How is the Census Bureau's enumerator hiring coming along?

ANSWER:

We have been able to recruit sufficient staff to complete the precensus operations conducted to date. These operations, however, are small in comparison to the upcoming major operations, such as nonresponse follow-up. To meet the staffing needs for the major operations, we have established a very high recruiting goal for each district office. The recruiting goal is based on a somewhat "worst-case" scenario. Specifically, the recruiting goal assumes that:

- o No employee will work in more than one job or operation.
- o We will experience our expected turnover rates, which range from 50% to 100%.
- o We must recruit 4 persons for every person we plan to hire to allow for a sufficient number of qualified applicants that will accept the job when offered.

To date, our recruiting is proceeding according to plan. We reached our national target of recruiting 30 percent of the recruiting goal (about 2 million persons) in advance of our March 2 date for reaching this level. We are working closely with those district offices that have not been able to meet our established goals. We will continue to monitor the district office recruiting efforts on a weekly basis.

QUESTION:

Will the Bureau meet all of its needs and if not, why not?

ANSWER:

The recent Congressional cuts of $57.6 million from the President's request on top of previous cuts and cost absorptions might compromise our ability to conduct a full and fair census.

Our ability to proceed as planned within the currently appropriated amount depends primarily upon the mail response rate, which we shall know in late April. As we have told this Committee before, we had requested an FY 1990 budget that assumed a 70 percent mail response rate (as compared to an actual response rate of 75 percent in 1980.) Given the Congressional budget cut in FY 1990, if the actual rate in 1990 is at or near 70 percent, we may have a budget shortfall. In that case, we will need to look at options to cover the shortfall. If the actual rate approximates our 1980 experience, we hope to be able to proceed within existing funding levels.

The mail response rate is critical because we must visit each housing unit for which a questionnaire is not returned. We estimate that each one percent change in the mail response rate translates into approximately $10 million. However, it is difficult to predict definitively any budget shortfall which might result based solely on the mail response rate. Other factors that may affect the size of any shortfall include keying and enumerator productivity rates, attrition and the size of the census job applicant pool. Of course, other totally unanticipated setbacks, such as natural calamity, may also affect funding needs. We will be in a better position to address our funding situation when the mail response rate is known.

To the extent that we can achieve savings in currently planned operations over the next few weeks without compromising the census, we will make every effort to do so. Assuming existing planning parameters are met and there are no unanticipated setbacks or additional savings achieved, we now expect we need an actual mail response rate of approximately 75-76 percent. We will monitor carefully the response rate during mid-to-late April and will keep the Committee fully apprised. We understand that supplemental appropriations have been required during past decennial years.

QUESTION:

Will the Census Bureau be able to have enough materials printed for foreign language instruction materials and other promotional items?

ANSWER:

We are in the process of providing foreign language assistance guides in 32 languages for use in communities requiring special assistance in languages other than

English or Spanish. These are being provided to local walk-in assistance centers that provide questionnaire assistance at about 10,000 locations throughout the country, as well as to the district offices for use by census enumerators. Other assistance specifically aimed at respondents who do not speak English or require assistance in a foreign language include the Spanish-language questionnaires that are available upon request from respondents who receive English-language forms. We also have implemented toll free "800" number telephone assistance service in Spanish and six Asian languages. The 800 numbers are listed on the census questionnaire, English and Spanish versions of the "Were You Counted?" form and on the Early Alert Multilingual Mail-out flyer. We think that we have provided for adequate supplies of printed materials to support these efforts successfully.

Production of some of our promotional materials has occurred later than originally planned and in some cases, at higher than budgeted costs; however, sufficient quantities are being provided to meet the objectives of the 1990 promotion and outreach plan.

QUESTION:

How is the Bureau's homeless count effort coming along?

ANSWER:

The Census Bureau has attempted to count as part of the 1990 Census selected components of the homeless population. On March 20-21, 1990, shelter and street night, or S-Night, the field operation to enumerate selected components of the homeless, was implemented as planned. We believe that the conduct of S-Night was successful, and represents a good start to the 1990 Census enumeration efforts.

Several preparatory steps had to take place to ensure a successful enumeration. Last fall, the Census Bureau contacted over 39,000 local governments in an effort to identify shelters, street locations, and abandoned buildings where the homeless may congregate. For cities of 50,000 population or more, we received responses from over 92 percent of the governments. For those that did not respond, the local district office worked with local organizations or agencies that provide services to the homeless to identify these same types of locations.

We also made an effort to recruit the homeless and people who work with the homeless to conduct the enumeration.

All procedures, forms, and materials required to conduct S-Night were in place as planned. The enumeration took place on March 20-21, with a few cities (including Washington, DC and Phoenix) carrying over into a second night to complete the enumeration.

QUESTION:

How is the Bureau's group quarters enumeration coming along (which will count college campuses such as Michigan State University)?

ANSWER:

Our group quarters enumeration activities are proceeding according to plan. All procedures, forms, and materials required to conduct group quarters enumeration have been completed. We have successfully completed the necessary preparatory operation, known as special place prelist, where enumerators visit special places, including colleges and universities, to identify, classify, and obtain information about each living quarters at the special place. They also establish a contact at the special place whom they will work through to conduct the enumeration. This includes establishing time when students will be at the school, and if spring break occurs during the time period scheduled for group quarters enumeration, we will conduct enumeration before students leave or upon their return to school. The field enumeration will start on April 2, 1990.

FY 1991 Budget

QUESTION:

Does the budget request contain enough funds to ensure the timely compilation and release of census data?

ANSWER:

First, assuming that the vacant/delete check is funded through a better than anticipated mail response rate, and second, assuming that our other assumptions about productivity and work loads hold, we anticipate having adequate funds to ensure that census data are compiled and released on time and according to the goals laid out in the FY 1991 Congressional budget submission. Additionally, as mentioned earlier, we recently made a change to the edit follow-up program to cover unavoidable cost absorptions and increases required for completing census operations according to plan. Of course, a large unanticipated setback such as a national calamity could disrupt our plans to complete the census within schedule.

QUESTION:

Does the request contain enough funding to ensure the timely completion of the Post Enumeration Survey and analysis of statistical adjustment methods?

ANSWER:

The FY 1991 budget includes funding to complete the Post Enumeration Survey as planned. We have been absorbing other costs associated with adjustment, for example, for the Special Advisory Panel on Adjustment, through expenditure savings or tradeoffs with other less critical program components.

FRIDAY, MARCH 2, 1990.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

WITNESSES

DR. JOHN A. KNAUSS, UNDER SECRETARY FOR OCEANS AND ATMOSPHERE AND ADMINISTRATOR

DR. RODNEY F. WEIHER, COMPTROLLER

ELBERT W. FRIDAY, ASSISTANT ADMINISTRATOR FOR WEATHER SERVICES

THOMAS PYKE, ASSISTANT ADMINISTRATOR FOR SATELLITE AND INFORMATION SERVICES

DR. NED A. OSTENSO, ACTING CHIEF SCIENTIST

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. The first item we will consider this morning is the 1991 budget request for NOAA. The total request is $1,320,263,000. That is an increase of $101,959,000 over the amount appropriated for fiscal year 1990.

We will insert the budget justifications in support of this request into the record at this point.

[The budget justification materials follows:]

Department of Commerce
National Oceanic and Atmospheric Administration

Budget Estimates, Fiscal Year 1991
Congressional Budget Submission

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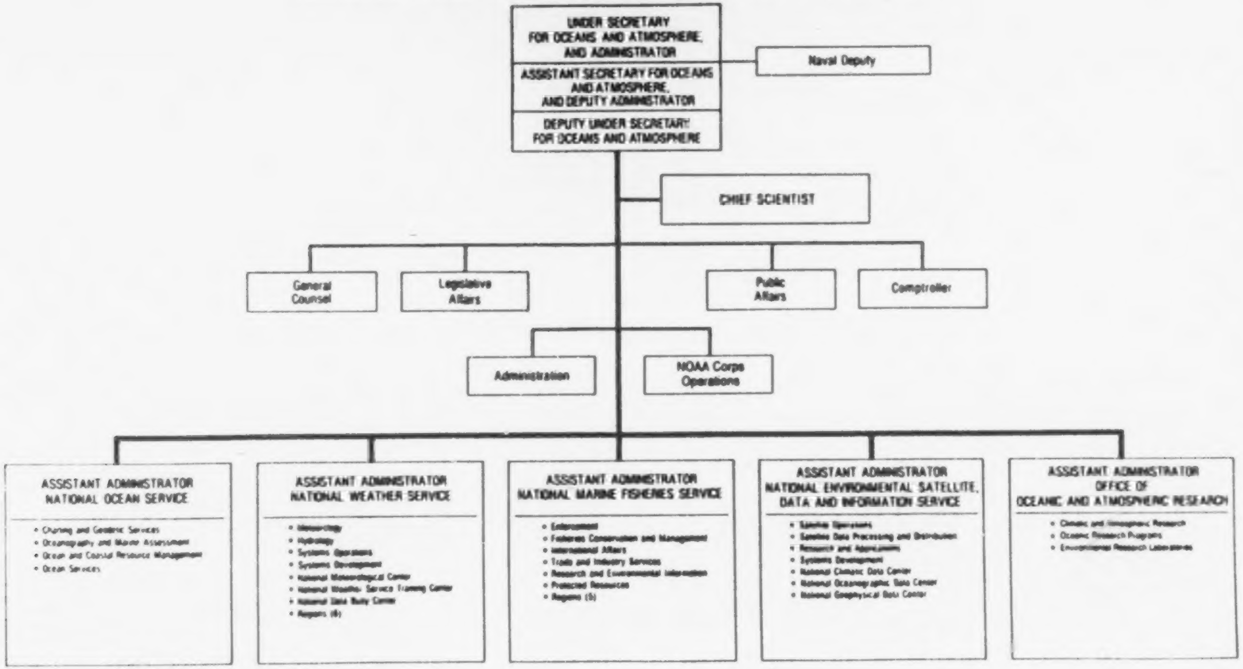
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION


UNDER SECRETARY FOR OCEANS AND ATMOSPHERE, AND ADMINISTRATOR
ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE, AND DEPUTY ADMINISTRATOR
DEPUTY UNDER SECRETARY FOR OCEANS AND ATMOSPHERE
Naval Deputy
CHIEF SCIENTIST
General Counsel
Legislative Affairs
Public Affairs
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• National Geophysical Data Center
ASSISTANT ADMINISTRATOR OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH
• Climatic and Atmospheric Research
• Oceanic Research Programs
• Environmental Research Laboratories

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General Statement

NOAA was created by the President's Reorganization Plan No. 4 of 1970 to consolidate many of the Nation's civil programs related to the oceans and atmosphere. NOAA's broad goals include the development and operation of national programs to: (1) manage and conserve selected marine resources for the economic and social good of the Nation; (2) monitor and predict weather and environmental conditions for the protection of life and property; (3) assist states in establishing and maintaining marine and estuarine sanctuaries; (4) provide basic maps, charts, surveys, and specialized data for safe navigation; (5) provide research to advance oceanic and atmospheric technology for the better management of the environment and the rational use of our natural resources; and (6) operate satellite systems to provide national and global data and information services and products.

NOAA's management structure (see NOAA-1) consists of nine staff offices and five line offices -- the National Ocean Service; National Weather Service; National Marine Fisheries Service; National Environmental Satellite, Data, and Information Service; and the Office of Oceanic and Atmospheric Research. The program structure consists of six major activities under the Operations, Research, and Facilities appropriation, and several other accounts. The six major activities are: the National Ocean Service; the National Marine Fisheries Service; Oceanic and Atmospheric Research; the National Weather Service; the National Environmental Satellite, Data, and Information Service; and Program Support.

A comparison of the FY 1990 appropriations with the FY 1991 budget request is shown below: (dollar amounts in thousands)

	1990 Appropriation		1991 Estimate		Inc. (+) or Dec. (-)		Permanent Employment 11/18/89
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Operations, research, and facilities....................	10,034	1,214,607	9,949	1,316,064	-85	+101,457	11,446
Fishing vessel and gear damage compensation fund.......	3	1,000	3	1,202	0	+202	3
Fishermen's contingency fund...........................	1	734	1	1,000	0	+266	2
Foreign fishing observer fund..........................	15	1,963	15	1,997	0	+34	18
Fisheries promotional fund.............................	3	0	0	0	-3	0	3
Promote and develop fishery products...................	11	0	0	0	-11	0	0
Federal ship financing fund............................	21	0	21	0	0	0	26
Subtotal...	10,088	1,218,304	9,989	1,320,263	-99	+101,959	11,498
Trust Fund:							
Aviation weather.......................................	0	29,583	0	34,521		+4,938	
Total..	10,088	1,247,887	9,989	1,354,784	-99	+106,897	11,498
Proposed for later transmittal:							
Operations, research and facilities....................			(752)	(45,481)	(752)	45,481	
Marine waterways trust fund............................				45,481		45,481	

Highlights of 1991 Request

The NOAA budget reflects proposals to conduct a balanced program of oceanic and atmospheric science and service functions that meet high-priority national needs.

A major enhancement to support the President's initiative in global climate change is proposed. Funds would be used to fulfill NOAA's focused program responsibilities in the U.S. Global Change Research Program and to improve global change science and services by developing and applying new data management capabilities. In addition, an enhancement to the Coastal Ocean program initiated in 1990 is included.

The request provides increases to proceed with the full-scale production phase of the tri-agency Next Generation Weather Radar (NEXRAD) program as well as increases in other elements of the National Weather Service modernization.

Several NOAA programs are proposed for termination in 1991. Included in this group are grants to states and other fisheries development programs and specialized weather services. These programs have accomplished their intended goals and should now be supported by the users and beneficiaries of their services.

The changes between the 1991 base and the requested 1991 program are summarized by appropriation as follows:

Operations, Research, and Facilities

National Ocean Service - An increase is requested in the Ocean Services program to maintain basic real-time ocean data, collection, monitoring, analysis, prediction, and distribution capabilities fundamental to marine weather forecasts and warnings, (+$2,300,000). An increase is requested in the Coastal Ocean program to continue the program started in FY 1990 and will improve NOAA's capability to characterize, understand, predict, and help the Nation cope with serious coastal environmental issues (+$11,000,000). An increase is requested to fund research proposals at marine sanctuaries (+$200,000). For FY 1991, decreases will terminate funding for the Great Lakes shoreline mapping plan, which will be completed in 1990 (-$100,000); terminate state-specific geodetic surveys (-$577,000); terminate the multi-purpose cadastre program (-$1,836,000). Decreases for low-priority activities will reduce circulatory program activities (-$400,000); eliminate funding for the California data buoy program (-$151,000); terminate funding for a circulation survey of Tampa Bay which will be completed in 1990 (-$1,000,000); state specific oceans services (-$875,000); and a state specific research and development project (-$900,000). Reductions are also proposed in Coastal Zone Section 306 and 306A grants (-$4,000,000); CZM Section 309 grants (-$400,000); and CZM program management (-$500,000).

National Marine Fisheries Service - Increases are requested for Bering Sea pollock research (+$750,000); marine mammal population assessments (+$3,000,000); Alaska by-catch issues (+$750,000); and Alaskan groundfish surveys (+$700,000). Increases are also requested for PACFIN activities (+$1,000,000); Alaska groundfish monitoring (+$2,000,000); computer systems upgrades (+$1,700,000); and Driftnet Act implementation (+$300,000). Decreases are proposed for stock enhancement and disease research (-$4,287,000); protected species research (-$649,000); Chesapeake Bay studies (-$1,600,000); right whale research (-$235,000);

Alaska salmon research (-$3,766,000); sub-Arctic bottomfish research (-$753,000); Hawaii stock management plan (-$400,000); Yukon River chinook study (-$235,000); Antarctic research (-$1,300); Atlantic salmon research (-$500,000); oyster disease research (-$500,000); and field structure savings (-$4,000,000). Decreases are also proposed for: Columbia River programs (-$9,300,000); management of Georges Bank fisheries (-$471,000); and data collection on Oregon harbor seals and sea lions (-$36,000). No funding is requested for interjurisdictional fisheries grants (-$3,500,000); anadromous fisheries grants (-$2,354,000); striped bass research (-$471,000); and funding support for the three interstate fisheries commissions (-$330,000). Decreases are also proposed for product quality and safety (-$4,400,000); fish oil research (-$942,000); mahi export strategies (-$188,000); the model seafood inspection program (-$330,000); and shellfish water standards research (-$500,000).

Oceanic and Atmospheric Research - Increases are proposed for climate and global change (+$69,000,000); and for solar-terrestrial services and research (+$1,500,000). Decreases are proposed for the National Climate Program (-$1,090,000); NAPAP (-$1,487,000); PROFS (-$1,883,000); and Sea Grant (-$13,300,000). Proposed for termination are state weather modification grants Regional Climate Centers (-$1,800,000); Inter-governmental Panel on Climate Change (-$250,000); VENTS (-$2,000,000); FOCI (-$942,000); national coastal resources research and development institute (-$1,177,000); the U.S./Asia aquaculture science exchange (-$282,000); NURP (-$14,285,000); and the Key Largo tropical research facility (-$377,000).

National Weather Service - Increases are requested for MARDI (+$11,000,000); NEXRAD (+$43,284,000); ASOS (+$5,375,000); and AWIPS/NOAA-Port (+$28,367,000). Decreases are proposed for Weather Service Forecast Offices (-$787,000); Pacific-Alaskan regional headquarters consolidation (-$383,000); Southern-Central-Eastern regional headquarters consolidation (-$852,000); data buoy engineering (-$540,000); fire weather services (-$470,000); and Hawaii data buoy maintenance (-$565,000). No funding is requested for the agricultural weather services program (-$1,745,000); for the fruit frost weather program (-$679,000); maintenance of the Susquehanna River Basin flood warning system (-$700,000); maintenance of the Colorado River basin flood warning system (-$300,000); and contract observations at three locations (-$200,000). Decreases are also proposed for equipment maintenance (-$1,054,000) and maintenance of the Class VII computer (-$500,000).

National Environmental Satellite, Data, and Information Service - Increases are proposed for polar satellites (+$53,806,000); and Landsat commercialization (+$1,600,000). Decreases are proposed for polar satellites ground systems (-$4,334,000); geostationary satellites and ground systems (-$26,202,000); and Landsat operations (-$9,500,000).

Program Support - Increases are proposed for major projects procurement support (+$200,000) facilities maintenance (+$2,750,000); facilities consolidation (+$2,723,000); marine services (+$6,010,000); and aircraft services (+$1,866,000). A decrease is proposed for the Woods Hole Fisheries Lab - Bulkhead and Dock repair (-$2,000,000). Termination is proposed for the Southeast Marine Support Facility (-$282,000).

Fishing Vessel and Gear Damage Compensation Fund

An appropriation of $1,202,000 is requested to pay claims and administrative expenses under the Fishing Vessel Gear and Damage Compensation Fund.

Fishermen's Contingency Fund

An appropriation of $1,000,000 is requested to pay claims and administrative expenses under the Title IV of the Outer Continental Shelf Lands Act.

Foreign Fishing Observer Fund

Amendments to the Magnuson Fishery Conservation and Management Act allow foreign governments to contract directly for observer services from contractors approved by the Secretary of Commerce. An appropriation of $1,997,000 combined with direct contracts is sufficient to continue the current level of coverage.

Aviation Weather Services Program Trust Fund

An appropriation of $34,521,000 is requested to continue aviation weather services. This funding shall be derived by transfer from the Federal Aviation Administration Airport and Airway Trust Fund.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990	Pos./BA			10,034	1,214,607
		FTE/Obl.			10,696	1,357,922
	Sequester applied, 1990					0
	Appropriation currently available, 1990					1,214,607
						1,357,922
NOAA- 15	FY 1991 Adjustments to base:					
	Transfers		14	59,500		
			14			
	Adjustment for 1990 pay increase and related costs		0	14,287		
	Other cost changes		(8)	(1,046)		
			(7)			
	Subtotal, adjustments to base:				6	72,741
					7	
	1991 Base	Pos./BA			10,040	1,287,348
		FTE/Obl.			10,703	1,430,663

Page No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	National Ocean Service:											
NOAA- 45	Mapping, Charting, and Geodesy	Pos./BA	511	45,262	511	47,887	511	49,447	511	46,934	0	(2,513)
		FTE/Obl.	528	45,262	528	47,887	528		528		0	
NOAA- 53	Observation and Assessment	Pos./BA	316	30,763	332	41,896	332	42,444	329	51,418	(3)	8,974
		FTE/Obl.	326	30,856	339	41,911	339		336		(3)	
NOAA- 77	Ocean and Coastal Management	Pos./BA	80	43,712	80	47,430	80	45,894	80	41,194	0	(4,700)
		FTE/Obl.	83	44,952	83	50,802	83		83		0	
	Subtotal, National Ocean Service:	Pos./BA	907	119,737	923	137,211	923	137,785	920	139,546	(3)	1,761
		FTE/Obl.	937	121,070	950	140,600	950		947		(3)	

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA- 85	Information Collection and Analyses	Pos./BA	1,298	101,191	1,277	104,171	1,280	106,613	1,295	98,288	15	(8,325)
		FTE/Obl.	1,367	96,194	1,346	114,857	1,349		1,355		6	
NOAA-103	Conservation and Management Operations	Pos./BA	429	48,544	474	60,390	474	58,483	474	48,976	0	(9,507)
		FTE/Obl.	453	48,042	498	61,454	498		498		0	
NOAA-117	State and Industry Assistance Programs	Pos./BA	207	18,362	196	18,469	207	18,909	121	5,894	(86)	(13,015)
		FTE/Obl.	216	17,554	205	21,025	216		130		(86)	
	Subtotal, National Marine Fisheries Service:	Pos./BA	1,934	168,097	1,947	183,030	1,961	184,005	1,890	153,158	(71)	(30,847)
		FTE/Obl.	2,036	161,790	2,049	197,336	2,063		1,983		(80)	
	Oceanic and Atmospheric Research:											
NOAA-121	Climate and Air Quality Research	Pos./BA	273	46,286	281	53,856	281	54,299	312	118,672	31	64,373
		FTE/Obl.	308	45,979	315	54,163	316		337		21	
NOAA-135	Atmospheric Programs	Pos./BA	371	39,991	371	43,774	371	44,395	381	41,799	10	(2,596)
		FTE/Obl.	359	39,946	359	43,819	359		367		8	
NOAA-147	Ocean and Great Lakes Programs	Pos./BA	221	70,368	221	74,864	221	72,993	211	39,030	(10)	(33,963)
		FTE/Obl.	214	71,008	214	75,166	214		206		(8)	
	Subtotal, Oceanic and Atmospheric Research:	Pos./BA	865	156,645	873	172,494	873	171,687	904	199,501	31	27,814
		FTE/Obl.	881	156,933	888	173,148	889		910		21	
	National Weather Service:											
NOAA-159	Operations and Research	Pos./BA	3,390	281,779	3,334	287,091	3,334	289,831	3,263	292,556	(71)	2,725
		FTE/Obl.	3,746	274,319	3,688	297,962	3,688		3,623		(65)	
NOAA-185	Systems Acquisition	Pos./BA	39	63,150	39	101,425	39	100,941	39	177,467	0	76,526
		FTE/Obl.	119	42,082	119	147,316	119		119		0	
	Subtotal, National Weather Service:	Pos./BA	3,429	344,929	3,373	388,516	3,373	390,772	3,302	470,023	(71)	79,251
		FTE/Obl.	3,865	316,401	3,807	445,278	3,807		3,742		(65)	

	Comparison by activity: National Environmental Satellite, Data, and Information Service:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA-193	Satellite Observing Systems......	Pos./BA	486	359,363	486	242,998	478	242,886	478	258,256	0	15,370
		FTE/Obl.	467	362,363	467	242,998	459		459		0	
NOAA-207	Environmental Data Management Systems.........................	Pos./BA	372	21,220	372	21,536	372	22,174	372	22,174	0	0
		FTE/Obl.	325	21,220	325	21,536	325		325		0	
	Subtotal, National Environmental Satellite, Data, and Information Service:	Pos./BA	858	380,583	858	264,534	850	265,060	850	280,430	0	15,370
		FTE/Obl.	792	383,583	792	264,534	784		784		0	
	Program Support:											
NOAA-213	Administration and Services......	Pos./BA	1,217	63,195	1,217	64,480	1,217	67,275	1,217	67,475	0	200
		FTE/Obl.	1,312	62,992	1,312	65,591	1,312		1,312		0	
NOAA-217	Facilities........................	Pos./BA	0	471	0	3,421	0	3,204	1	6,677	1	3,473
		FTE/Obl.	0	1,081	0	3,816	0		1		1	
NOAA-225	Marine Services..................	Pos./BA	750	57,625	750	59,240	750	60,120	772	65,848	22	5,728
		FTE/Obl.	804	56,827	804	60,038	804		823		19	
NOAA-237	Aircraft Services................	Pos./BA	94	6,870	93	7,181	93	7,440	93	9,306	0	1,866
		FTE/Obl.	95	6,526	94	7,581	94		94		0	
	Subtotal, Program Support:	Pos./BA	2,061	128,161	2,060	134,322	2,060	138,039	2,083	149,306	23	11,267
		FTE/Obl.	2,211	127,426	2,210	137,026	2,210		2,230		20	
	TOTAL	Pos./Req.	10,054	1,298,152	10,034	1,280,107	10,040	1,287,348	9,949	1,391,964	(91)	104,616
		FTE/Obl.	10,722	1,267,203	10,696	1,357,922	10,703		10,596		(107)	

The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations. The second line contains data only when amounts are different from the permanent position and budget authority amounts.

Comparison by activity: Financing:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Budgeted Deobligations.............		0	(6,000)	0	(6,000)			0	(6,000)		
Coastal Energy Impact Fund		0	(6,500)	0	0			0	0		
Budget Authority..................	Pos./BA	10,054	1,285,652	10,034	1,274,107			9,949	1,385,964		
	FTE/Obl.	10,722		10,696				10,596			
Financing from proposed transfers: From "Promote and develop fishery products and research pertaining to American fisheries:...........			(45,600)		(55,000)				(61,900)		
Ocean and coastal programs funded from Coastal Energy Impact Fund			0		(4,500)				(8,000)		
Appropriation (general fund).......			1,240,052		1,214,607				1,316,064		

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service											
Mapping, Charting, and Geodesy..................	FTE/Obl.	462	41,345	462	42,011	462	42,011	462	41,324	0	(687)
Observation & Assessment...	FTE/Obl.	35	7,901	35	5,809	35	5,809	35	5,610	0	(199)
Ocean & Coastal Mgt.........	FTE/Obl.	0	40	0	964	0	964	0	314	0	(650)
Subtotal, NOS...............	FTE/Obl.	497	49,286	497	48,784	497	48,784	497	47,248	0	(1,536)
National Marine Fisheries Service:											
Information Collection and Analyses.........................	FTE/Obl.	106	9,237	106	8,321	106	8,321	106	5,382	0	(2,939)
Conservation and Management Operations......................	FTE/Obl.	20	1,859	20	2,699	20	2,699	20	2,869	0	170
State and Industry Assistance Programs........................	FTE/Obl.	0	197	0	97	0	97	0	76	0	(21)
Inspection and Grading............	FTE/Obl.	124	6,155	124	8,300	124	8,300	124	11,000	0	2,700
Subtotal, NMFS....................	FTE/Obl.	250	17,448	250	19,417	250	19,417	250	19,327	0	(90)
Oceanic and Atmospheric Research:											
Climate and Air Quality Research..	FTE/Obl.	79	8,737	79	11,091	79	11,091	79	9,388	0	(1,703)
Atmospheric Programs..............	FTE/Obl.	17	9,012	17	12,465	17	12,465	17	7,217	0	(5,248)
Ocean and Great Lakes Programs....	FTE/Obl.	3	1,184	3	963	3	963	3	1,010	0	47
Subtotal, OAR.....................	FTE/Obl.	99	18,933	99	24,519	99	24,519	99	17,615	0	(6,904)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Weather Service:											
Operations and Research...........	FTE/Obl.	797	61,330	777	67,581	777	67,581	777	75,464	0	7,883
Systems Aquisition................	FTE/Obl.	0	6,310	0	109,666	0	109,666	0	96,780	0	(12,886)
Subtotal, NWS.....................	FTE/Obl.	797	67,640	777	177,247	777	177,247	777	172,244	0	(5,003)
National Environmental Satellite, Data, and Information Service:											
Satellite Observing Systems.......	FTE/Obl.	0	8,923	0	19,710	0	19,710	0	19,200	0	(510)
Environmental Data Management System..........................	FTE/Obl.	33	6,074	33	5,358	33	5,358	33	5,305	0	(53)
Subtotal, NESDIS..................	FTE/Obl.	33	14,997	33	25,068	33	25,068	33	24,505	0	(563)
Program Support:											
Administration and Services.......	FTE/Obl.	36	13,676	36	13,627	36	13,627	36	13,145	0	(482)
Facilities........................	FTE/Obl.	0	1,002	0	0	0	0	0	0	0	0
Marine Services...................	FTE/Obl.	28	581	28	159	28	159	28	115	0	(44)
Aircraft Services.................	FTE/Obl.	1	1,775	1	1,525	1	1,525	1	1,225	0	(300)
Subtotal, PS......................	FTE/Obl.	65	17,034	65	15,311	65	15,311	65	14,485	0	(826)
TOTAL	FTE/Obl.	1,741	185,338	1,721	310,346	1,721	310,346	1,721	295,424	0	(14,922)
	POS	1,375		1,355		1,355		1,355			

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) from 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	1,452,541	1,668,268	1,597,694	1,687,388	89,694
Financing:					
Offsetting collections from:					
Federal funds	(142,162)	(263,816)	(263,816)	(245,588)	18,228
Trust funds	(28,717)	(29,583)	(34,521)	(34,521)	0
Non-Federal sources	(14,459)	(17,107)	(17,107)	(15,315)	1,792
Recoveries	(7,755)	(6,000)	(6,000)	(6,000)	0
Unobligated balance, start of year	(45,111)	(77,815)	0	0	0
Unobligated balance transferred	(6,500)	0	0	0	0
Unobligated balance, end of year	77,815	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Reimbursable sequester	0	160	160	0	(160)
Budget Authority	1,285,652	1,274,107	1,276,410	1,385,964	109,554
Financing from proposed transfers:					
From "Promote and Develop Fishery Products and Research Pertaining to American Fisheries"	(45,600)	(55,000)	(55,000)	(61,900)	(6,900)
From "Coastal Energy Impact Fund"	0	(4,500)	(4,500)	(8,000)	(3,500)
Appropriation	1,240,052	1,214,607	1,216,910	1,316,064	99,154

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Adjustments to Base and Built-in Changes
(dollar amounts in thousands)

Appropriation: Operations, Research and Facilities

	Perm Pos.	FTE	Amount
Transfers	+16	+16	+$59,500
Adjustment for 1990 pay increase and related costs			+16,287
Adjustment for 1991 pay increase and related costs			+6,753
Financing approved for 1990			+6,000
Other Increases:			
Cartographers pay increase			+483
Extra compensable day			+1,468
FERS Basic benefit contributions/Thrift Savings Plan			+544
Old Age, Survivors, Disability Insurance (OASDI)			+288
Medicare			+51
Health insurance premium			+708
Benefits for former personnel			+51
Transportation of things			+35
Rental payments to GSA			+2,657
Rental payments to others			+154
Communication, utilities and other charges			33
Printing and Reproduction			+350
Other services			+362
Supplies			+665
Subtotal, other increases			+7,629
Other Decreases:			
Effects of 1990 Gramm-Rudman - Hollings sequester			-6,079
Civil Service Retirement System (CSRS)			-247
Employees compensation fund			-245
Management savings (A-76)			-871
Communication, utilities, and other charges			-1,384
NESDIS personnel adjustment	-8	-8	0
Aviation Weather Funding Realignment			-5,357
Non-recurring programs			-7,265
Subtotal, other decreases	-8	-8	-21,420
Total, Adjustments to Base and Built-in Changes	+6	+6	72,741

Justification of Adjustments to Base and Built-in Changes

(dollar amounts in thousands)

Appropriation: Operations, Research, and Facilities	Perm Pos.	FTE	Amount
Transfers	+14	+14	+$59,500

$55,000 was transferred from "Promote and develop fishery products pertaining to American fisheries" in FY 1990 as a partial offset to the direct appropriation requirements of the "Operations, Research, and Facilities" account.

$4,500 was transferred from loan principal and interest repayment in the Coastal Energy Impact Fund in FY 1990 as a partial offset to the direct appropriation requirements of the "Operations, Research, and Facilities" account.

Three positions and three FTE no longer required in the Fisheries Promotional Fund (FPF) and eleven positions and eleven FTE from Promote and Develop Fishery Products will be transferred to Operations, Research, and Facilities (ORF).

	Perm Pos.	FTE	Amount
Adjustment for 1990 pay increase and related costs		0	14,287

Total cost in 1990 of pay increase	+$10,713,000
Less amount absorbed in FY 1990	- 10,713,000
Anticipated 1990 pay increase supplemental	0
Amount in 1991 to provide full-year cost of pay increase	14,287,000
Less amount absorbed	0
Subtotal, adjustment for 1990 pay raise	14,287,000

Effective January 1, 1990 Federal employees received a 3.6 percent pay increase. In 1990, NOAA is absorbing the full cost of this pay increase.

	Perm Pos.	FTE	Amount
Adjustment for 1991 pay increases and related costs			6,753

Total cost in 1991 of general pay increase	$12,010,000
Less amount absorbed in FY 1991	-6,005,000
Subtotal, adjustment for 1991 general pay increase	6,005,000
Total cost in 1991 of SES pay increase	1,496,000
Less amount absorbed	- 748,000
Subtotal, adjustment for 1991 SES increase	748,000
Total adjustment for FY 1991 pay increases	6,753,000

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

	Perm Pos.	FTE	Amount
Financing approved for FY 1990			+$6,000

Deobligations of $6,000,000 from various NOAA programs will be used as a partial offset to the "Operations, Research, and Facilities" account.

Other increases:

Cartographers pay increase		0	483

Special salary rates approved by OPM on June 13, 1989 increased Cartographers' pay and benefits from $4,829,305 to $5,311,924, for an adjustment-to-base increase of $482,619,000.

Extra compensable day		0	1,468

We have calculated the cost of one extra compensable day in 1991 compared to 1990 by dividing the 1990 estimate of $381,779 for personnel compensation and benefits by 260 compensable days for an adjustment of $1,468.

Federal Employees' Retirement System (FERS)		0	544

Basic benefit contributions: (+474)

The number of employees covered by the Federal Employees' Retirement Systems (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate the percentage of payroll of eligible employees covered by FERS will rise from 15.7 percent in 1990 to 16.8 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.00 percent. The calculations for basic benefits increases are:

Payroll subject to retirement systems	$320,965
Basic benefit cost in 1991 ($320,965 x 16.8% x 13.00%)	7,010
Basic benefit cost in 1990 ($320,965 x 15.7% x 12.97%)	6,536
Increase in basic benefit contributions (1990 - 1991)	474

The cost of agency contributions to the Thrift Savings Plan will rise as FERS participation increases. We estimate agency contributions for the Thrift Savings Plan are 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Cost in 1991 ($320,965 x 16.8% x 2%)	$1,078
Cost in 1990 ($320,965 x 15.7% x 2%)	1,008
Increase in contributions (1990-1991)	70

FERS Basic Benefit	474
FERS Thrift Plan	70
Adjustment-to-Base	544

	Perm Pos.	FTE	Amount
Federal Insurance Contribution Act (FICA)...			339

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI), but are covered by Medicare. All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in FY 1991 from $50,025 in FY 1990, and the OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in FY 1991. The percentage of payroll subject to FICA will increase from 95.7 percent in 1990 to 96.7 percent in 1991. This will result in an increase of $287,905, as follows:

OASDI: (+288)

FERS payroll subject to FICA tax in 1991 ($320,965 x 16.8% x 96.7%)	52,143	
FERS OASDI tax in 1991 ($52,143 x 6.20%)...............................		3,233
FERS payroll subject to FICA tax in 1990 ($320,965 x 15.7% x 95.7%)	48,225	
FERS OASDI tax in 1990 ($48,225 x 6.17%)...............................		2,975
Increase (1990 - 1991)..		258
Other payroll not covered by retirement systems ($33,089)...........		
Other payroll subject to FICA tax in 1991 ($33,089 x 96.7%)..........	31,997	
OASDI tax in 1991 ($31,997 x 6.20%).....................................		1,984
Other payroll subject of FICA tax in 1990 ($33,089 x 95.7%)..........	31,666	
OASDI tax in 1990 ($31,666 x 6.17%).....................................		1,954
Increase (1990 - 1991)..		30
Total, OASDI increase (1990 - 1991)................................		288

MEDICARE: (+51)

All employees are subject to Medicare contributions. While the rate will remain at 1.45 percent, the percentage of payroll subject to FICA will increase from 95.7 percent in 1990 to 96.7 percent in 1991. The cost of Medicare will increase as follows:

Total payroll ($320,965 + $33,089 = $354,054).........................	
Total payroll subject to FICA in 1991 ($354,054 x 96.7%)............	342,370
Total payroll subject to FICA in 1990 ($354,054 x 95.7%)............	338,830
Increase in payroll subject to FICA (1990 - 1991)....................	3,540
Increase in Medicare tax ($3,540 x 1.45%)..........................	51

OASDI increase...	288
Medicare increase..	51
Total, increase..	339

	Perm Pos.	FTE	Amount
Health insurance premium... Effective the first pay period following December 31, 1988, NOAA's contribution to the Federal Employees Health Benefits Program increased. The estimated cost of health benefits for NOAA in FY 89 is $15,972,000 an increase of $708,000 over the base of $15,264,000.		0	708
Benefits for former personnel... Pribilof Islands (+708) In compliance with the Fur Seal Act of 1966 and amendments (P.L. 98-129), NOAA is required to reimburse the Office of Personnel Management for annuity payments made to Pribilof Island employees who worked prior to 1950 and their survivors. The 1987 cost has increased from $471,300 to $522,300 for an adjustment of $151,000. These figures were derived from actual billings received from OPM.		0	51
Transportation of things... United Parcel Service shipping rates have increased by 4.9% effective February 6, 1989, for an increase of $35,400 for shipping and handling of aeronautical and nautical navigational products.		0	35
Rental payments to GSA... An adjustment-to-base of $2,657,000 is requested for rental payments to GSA over the 1990 adjusted base of $30,909,000. This request reflects actual costs incurred in FY 1989 (which were higher than GSA's 1989 budget estimate), costs associated with NOAA's move to Silver Spring and savings resulting from the move, as well as a 4.4% estimated increase by GSA in rent per square foot in 1991.		0	2,657
Rental payments to others... The National Marine Fisheries Service requests $46,640 for increased rental payments for the following:		0	154

Lease costs for NMFS Southeast Fisheries Center's Charleston Laboratory, SC, increased from an FY 1987 cost of $363,533 to $404,153 in FY 1988, an adjustment of $40,620. This was mandated by the lessor, the state of South Carolina.

Lease costs for NMFS office space at NASA's Stennis Space Center in Mississippi increased from an FY 1988 annual cost of $39,384 to $43,089 in FY 1989, an adjustment of $3,705. This was mandated by NASA in a letter outlining new rates.

Lease costs for docking space for the NMFS vessel CHAPMAN increased from an FY 1987 annual lease of $6,000 to $7,200 in FY 1988, an adjustment of $1,200. This was mandated by the lessor, Alpo Petfoods, Inc. in an amended lease contract.

Lease costs for office and storage space for NMFS Southeast Fisheries Center facility in Freeport, TX, increased from an FY 1987 annual cost of $2,352 to $3,467 in FY 1988, an adjustment of $1,115. This was mandated by the lessor in an amended lease contract.

	Perm Pos.	FTE	Amount

Oceanic and Atmospheric Research is requesting an adjustment to base to cover the increased costs charged by the National Institute of Standards and Technology (NIST) for space at the Boulder site in Boulder, Colorado. The 1989 cost for 41,278 square feet of space was $604,341 and the 1990 cost is projected to be $627,252 for an increase of $23,000.

The National Weather Service requests $54,836 for the following:

Lease costs for space at the Philadelphia International Airport increased from $12,099 in 1988 to $19,119 in 1989 for an adjustment to base of $7,000.

Lease costs for space occupied in the Albany, NY County Airport increased from $23,100 in 1988 to $52,800 in 1989, an adjustment of $29,700.

Lease costs at various municipalities increased from a total cost of $179,097 to $197,233 for an adjustment of $18,136.

The Office of Administration requests $30,000 to cover the increased cost from 1990 to 1991 of space occupied by NOAA in NIST'S Radio Building in Boulder, Colorado.

	Perm Pos.	FTE	Amount
Communications, utilities, and miscellaneous charges................			33

Rental costs of copier equipment in the NMFS Pascagoula, MS facility increased from $4,668 in 1987 to $7,500 in 1988, an adjustment of $2,832.

Telecommunication costs increased to cover a change in the FTS switching stations from Orlando to Miami. New charges were levied against the SE Fisheries Center in Miami because GSA requested Southern Bell Telephone to improve FTS services to users. This change in service, while not increasing the facility's operational efforts, did result in an increase of $8,640 per year?. Prior to 10/16/88, there was no charge for this service.

Based on billings from AT&T, Pacific Bell Telephone, and state teletype contracts, costs for services provided by North Dakota's Weather and Road Information Teletype Emergency Network (WRITTEN) have increased from $28,371 in 1988 to $49,544 in 1989, resulting in an adjustment of $21,173.

	Perm Pos.	FTE	Amount
Printing and Reproduction................			350

The increase of $350,000 was calculated by applying the United States Government Printing Office's estimated 7 percent increase to the 1988 actual cost of $5,000,000 for printing and reproduction.

	Perm Pos.	FTE	Amount
Other Services................			362

	Perm Pos.	FTE	Amount

Program Support costs have increased by $55,752. This consists of: 1) $12,300 for the increase in vendor prices for the distribution of bulk material; 2) $19,700 for the janitorial services contract at Sand Point increasing from $427,226 in 1988 to $447,226 in 1989; 3) $1,400 for basic services provided for the Energy Management and Control System increasing from $27,500 in 1988 to $28,900 in 1989; 4) $200 for the increased cost of plant care at Sand Point increasing from $6,508 in 1988 to $6,748 in 1989; and 5) $22,152 for NOAA Aircraft maintenance costs increasing from $177,270 in 1988 to $199,422 in 1990. These increases are based on actual contract modifications received from vendors.

Automated data processing hardware maintenance costs on the CYBER 205 computer have increased by $91,300.

The U.S. Department of Labor has mandated increases in wage and benefit costs which cover multiple contract weather observers at several airports and other observation sites. Total contract costs in 1988 were $1,743,540 and in 1989 were $1,983,676, for an adjustment of $240,134.

Based upon invoices and modified contracts, costs for the maintenance and repair of the NOAA Weather Radio Transmitter system went from $182,798 in 1988 to $195,643 in 1989, an increase of $12,700.

Working Capital Fund: An additonal $150,000 is required to fund cost increases in the Departmental Working Capital Fund to maintain their current level of operation.

The National Security Decision Directive 201 requires that the implementation and recurring costs for national level telecommunications programs be shared among the organizations. Because NOAA's share went down from $217,686 in 1989 to $29,517 in 1990 a decrease of $188,169 is required.

Supplies and materials...		0	645

The cost of chart paper for National Ocean Service map printing has increased by $73,900. Distribution of maps seven times per year is mandated by the Interagency Cartographic Committee and the Federal Aviation Administration for the management of the national airspace system.

A comparative review of 1988 and 1989 prices of most items in the GSA Supply Catalogs shows that the cost of GSA office supplies and tools has increased by 25.9 percent or $15,300 over a base of $58,968.

Based on invoices received from Page Avjet Corporation, which reflect the 1988 cost of $387,426 increasing in 1989 to $442,772, the price of jet fuel used in NOAA aircraft for base funded flight hours has increased by $55,346.

Based on invoices received from Xerox Corporation, the cost of xerographic paper has increased by $6,000 from a 1988 cost of $20,408 to a 1989 cost of $26,387.

Manufacturing companies listings of identical types, quantities, and revised prices indicate that the cost of reconditioning meteorological sensing and telemetry instruments and supplies (radiosondes) utilized by the National Weather Service for upper air soundings went from $5,985,496 in 1988 to $6,280,435 in 1989, an increase of $294,939.

		Perm Pos.	FTE	Amount
Other Decreases:				
Full year GRH 1990 original sequester amount carried forward into 1991:				
Total GRH Reductions in 1991	- 6,079			-6,079
Sequester applied in 1990 (included in base)	0			
Additional reduction required for full year effect in FY 1991 of 1990 sequester (ATB)	- 6,079			
Civil Service Retirement System (CSRS)			0	-267

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by the CSRS will drop from 84.3 percent for CSRS in 1990 to 83.2 percent in 1991. This will result in a decrease of 267,143 in the cost of CSRS contributions from $18,960,144 in 1990 to $18,693,001 in 1991.

1991 = (320,965 x 83.2% x 7.0%) =	18,693,002
1990 = (320,965 x 84.3% x 7.0%) =	18,960,145
Total Decrease	-267,143

	Perm Pos.	FTE	Amount
Employee compensation fund			-245

The decrease in the repayment to the Employees' Compensation Fund bill is a result of lower costs in the year ending June 30, 1989 ($3,308,711) than in the year ending June 30, 1988 ($3,553,626).

	Perm Pos.	FTE	Amount
Management savings			-871

Management savings will be achieved through productivity savings.

	Perm Pos.	FTE	Amount
Rent, Communications, and utilities			-1,384

Following implementation of FTS-2000, GSA anticipates a lower rate charged for telephone service to NOAA of -$1,384.

	Perm Pos.	FTE	Amount
NESDIS personnel adjustment	- 8	- 8	0

Environmental Observing Services FTE reduced for LANDSAT oversight-8.

	Perm Pos.	FTE	Amount
NWS Aviation Weather funding realignment..			- 5,357

Aviation Weather Services in NWS (direct OR&F) are reduced by $5,357 to account for an additional program offset of $5,357 from the Aviation Weather Trust Fund.

	Perm Pos.	FTE	Amount
Non-recurring programs..			-7,245

Buxton Woods (-$1,500)

The Coastal Zone Management Program was established in 1972 to assist coastal states in developing the capability to manage their coastal resources. In 1990, CZM funds include a special designation of $1,500,000 of Section 306 funds for the acquistion of Buxton Woods, North Carolina. Funding is not required for this project in FY 1991 as acquisition will be completed in FY 1990.

St. Paul Trust Fund (-$1,600)

In FY 1989/90, Congressional add-ons were provided for the St. Paul Trust Fund. Congress recognized that the Pribilof Islands' economy will rely completely on this Fund while the harbor project continues. This funding will sustain the Aleut community through FY 1990 and will not be required in FY 1991.

St. George Trust Fund (-$1,100)

In FY 1990, a Congressional add-on was provided for the St. George Trust Fund. This funding will sustain the Aleut community through FY 1990 and will not be required in FY 1991.

Alaska Whale Reimbursement (-$170)

In FY 1990, a Congressional add-on was provided to partially reimburse the North Slope Borough of Alaska for their part in the successful effort to free two California Gray Whales trapped in the ice at Barrow, AK. This funding was intended as a one-time reimbursement and will not be required in FY 1991.

University of New Hampshire Marine Programs (-$2,000)

Congress added $2,000,000 for a grant to the University of New Hampshire for a small research vessel and related equipment, laboratory equipment, and research instruments for the university's marine research and education programs. As these are one-time expenditures, no additional funds will be required in FY 1991.

Marine Electronics Agenda (-$675)

Congress added $675,000 in FY 1990 to complete the third and final phase of the Marine Electronics Agenda project. As this project will be completed in FY 1990, no additional funding is required in FY 1991.

Maintenance of Beaufort, NC Lab (-$200)

Congress added $200,000 in FY 1990 to repair damage to the Beaufort, NC marine fisheries lab caused by Hurricane Hugo. No additional funding is required in FY 1991.

	Perm Pos.	FTE	Amount
Total, Adjustment to Base and Built-in Charge..			872,741

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Justification of Proposed Language Changes

1. After the words "acquisition of land for facilities as authorized by 31 USC 883i;" insert "$1,316,064 to remain available until expended."

   Delete the following material:

   (1) $1,500,000 for the Stuttgart Fish Farming Experimental Station in Stuttgart, Arkansas.

   No funding for the facility is proposed for FY 1991; the deleted material is no longer required.

   (2) $377,000 for a semi - tropical research facilit at Key Largo, Florida.

   No funding for the facility is proposed for FY 1991; the deleted material is no longer required.

Appropriation Language and Code Citations:

1. For necessary expenses of activities authorized by law for the National Oceanic and Atmospheric Administration,

5 USC 3109
16 USC 760g
30 USC 1470
12 USC 1715m
16 USC 916j
33 USC 883c
15 USC 313nt
16 USC 1371
33 USC 883h
15 USC 1511
16 USC 1384
33 USC 1131
15 USC 2908
16 USC 1461
16 USC 661
16 USC 1534
33 USC 1704
16 USC 742d
16 USC 1852
37 USC 101 et seq.
16 USC 745
16 USC 1855
42 USC 8902
16 USC 757a
16 USC 3636
43 USC 1347(a)
16 USC 760a
30 USC 1419
16 USC 760f
30 USC 1469
7 USC 1622
16 USC 778
33 USC 883b
15 USC 313a
16 USC 1222
33 USC 883f
15 USC 713c-3(b)
16 USC 1381
33 USC 1130
15 USC 2906
16 USC 1456a
33 USC 1444
16 USC 1533
33 USC 1703
16 USC 742c
16 USC 1822(a)(4)
33 USC 1709
16 USC 744
16 USC 1854(e)
42 USC 7454
16 USC 756
16 USC 3633(c)
42 USC 8905(a)
16 USC 758a
30 USC 1412
15 USC 4278
30 USC 1428
5 USC 5902
16 USC 777
33 USC 853a-876
15 USC 313
16 USC 971h
33 USC 883e
15 USC 713c-3
16 USC 1380
33 USC 1121
15 USC 2904
16 USC 1452
33 USC 1442
16 USC 760e
33 USC 1701
16 USC 665
16 USC 1811
33 USC 1707
16 USC 742g
16 USC 1853
42 USC 7453
16 USC 755
16 USC 1882
42 USC 8904
16 USC 757d
16 USC 4008
49 App USC 1153
16 USC 1464(a)
5 USC 5901
16 USC 760h
33 USC 760 et seq.
15 USC 272
16 USC 959
33 USC 883d
15 USC 330b
16 USC 1377
33 USC 883i
15 USC 1516
16 USC 1432
33 USC 1441
15 USC 4211
30 USC 1424
16 USC 664
16 USC 1535
33 USC 1705
16 USC 742f
16 USC 1852h
42 USC 1891
16 USC 753a
16 USC 1861
42 USC 8903
16 USC 757b
16 USC 3641
44 USC 130
16 USC 760d
33 USC 1444

Government Organizations and Employees

5 USC 3109 - Employment of experts and consultants; temporary or intermittent.

"When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

5 USC 5901 - Uniform allowances.

This section authorizes annual appropriations to each agency of the Government of the United States, an amount for uniforms, or allowances for uniforms for employees of the agency who are required by regulation or statute to wear a prescribed uniform in the performance of official duties and who are not being furnished with the uniform.

5 USC 5902 - Increase in maximum uniform allowance.

This section increases the amounts for uniform allowances provided for in 5 USC 5901 and specifies that the increased allowances may not be reduced.

Agriculture National Marine Fishing

7 USC 1622 - Agricultural Marketing Act.

"The Secretary ... is directed and authorized: ...
(a) (b) (1) to determine the needs and develop or assist in the development of plans for the proper assembly, processing, transportation, storage, distribution, and handling of agricultural (fish) products.
(c) (h) to inspect, certify, and identify the class, quality, quantity and condition of agricultural (fish) products ...

(f) to conduct and cooperate in consumer education for the more effective utilization and greater consumption of agricultural products (fish)...

(g) to collect and disseminate marketing information... for the purpose of ... bringing about a balance between production and utilization of agricultural (fish) products.

(m) to conduct ... research ... to determine the most efficient ... processes for the handling, storing, preserving, protecting...of agricultural (fish) commodities ..."

Banks and Banking NOAA Corps.

12 USC 1715m - Mortgage Insurance Payments.

This section authorizes payment of Federal Housing Administration (FHA) home mortgage insurance premiums to NOAA Corps Officers.

Commerce and Trade

15 USC 272 - Functions of Secretary.

"The Secretary of Commerce...is authorized to undertake the following functions:

(b) The determination of physical constants...when such data are of great importance to scientific or manufacturing interests and are not to be obtained of sufficient accuracy elsewhere.

In carrying out the functions enumerated in this section, the Secretary is authorized to undertake the following activities and similar ones for which need may arise in the operations of Government agencies, scientific institutions, and industrial enterprises:

(12) the investigation of the conditions which affect the transmission of radio waves from their source to a receiver;

(19) the compilation and publication of general scientific and technical data resulting from the performance of the functions specified herein or from other sources when such data are of importance to scientific or manufacturing interests or to the general public, and are not available elsewhere, including demonstration of the results... by exhibits or otherwise as may be deemed most effective."

Weather Modification P.L. 99-272

15 USC 313 - Duties of Secretary of Commerce.

"The Secretary of Commerce...shall have charge of the forecasting of weather,...issue of storm warnings,...weather and flood signals,... gauging and reporting of rivers,...collection and transmission of marine intelligence...,...reporting of temperature and rainfall conditions..., the display of frost and cold-wave signals, the distribution of meteorological information..., and the taking of such meteorological observations as may be necessary to establish and record the climatic conditions of the United States, or as are essential for the proper execution of the foregoing duties."

15 U.S.C. 313a - Duties of Secretary of Commerce.

"... The Secretary of Commerce shall ... take such actions as may be necessary in the development of an international basic meteorological reporting network in the Arctic region of the Western Hemisphere..."

15 USC 313nt - Study of Thunderstorms and Atmospheric Disturbances; Reports; Expenditures; Cooperation of Other Departments.

"...the Secretary of Commerce is authorized and directed to study fully and thoroughly the internal structure of thunderstorms, hurricanes, cyclones, and other severe atmospheric disturbances,... with a view to establishing methods by which the characteristics of particular thunderstorms may be forecast and methods by which the characteristics of such storms may be determined on visual observation from outside of the immediate thunderstorm area."

15 USC 330b - Duties of Secretary - Records, maintenance, summaries, publication.

"(a) The Secretary shall maintain a record of weather modification activities, including attempts, which take place in the United States and shall publish summaries thereof from time to time as he determines."

Weather Modification P.L. 99-272

15 USC 713c-3 - Saltonstall - Kennedy Act.

This section provides for a national program to promote the free flow of domestically produced fishery products by conducting fishery educational, technological and biological related research and marketing pertaining to American fisheries.

15 USC 713c-3(b) - Saltonstall -Kennedy Act.

There shall be deposited in the fund moneys transferred to the fund under the Saltonstall Kennedy Act.

15 USC 1511(c) NOAA Estuarine Programs Office

... The Estuarine Programs Office shall develop, coordinate, and implement the estuarine activities of the administration with the activities of other Federal and State agencies. There are authorized to be appropriated to the Administration not to exceed $560,000 for fiscal year 1989, and $600,000 for fiscal year 1990.

15 USC 1514 - Basic authority for performance of certain functions and activities of Department.

"Appropriations are authorized for the following activities of the Department of Commerce:

(a) furnishing to employees...and their dependents, in Alaska and other points outside the continental United States, free emergency medical services...and supplies;

(b) ...purchasing, transporting, storing, and distributing food and other subsistence supplies for resale to employees...and their dependents, in Alaska and other points outside the continental United States at a reasonable value...; Provided, That a report of such transaction shall be made to Congress annually showing the total expenditures made for such supplies and the total proceeds from such resales;

(c) ...establishment, maintenance, and operation of messing facilities, by contract or otherwise, in Alaska and other points outside the continental United States..., such service to be furnished to employees...and their dependents,...

(d) reimbursement...of officers or employees in or under the Department...for food, clothing, medicines, and other supplies furnished by them in emergencies for the temporary relief of dislocated persons in remote localities;

(e) providing motion-picture equipment and film for recreation of crews of vessels..., for...employees in remote localities..., and for training purposes;

(f) erecting, altering, repairing, equipping, furnishing, and maintaining...such living quarters and facilities as may be necessary to carry out its authorized work at remote localities not on foreign soil where such living and working accommodations are not otherwise available."

National Climate Program Act P.L. 100-685

15 USC 2904 - National climate program.

"The Secretary (of Commerce) shall establish within the Department of Commerce a National Climate program office...The office shall be the lead entity responsible for administering the Program. The program shall include, but not be limited to, the following elements:

(1) assessments of the effect of climate on the natural environment, agricultural production, energy supply and demand, land and water resources, transportation, human health and national security.
(2) basic and applied research to improve understanding of climate processes,...
(3) methods for improving climate forecasts...
(4) global data collection, and monitoring and analysis activities...
(5) systems for the management and...dissemination of climatological data, information and assessments...
(6) measures for increasing international cooperation in climate research, monitoring, analysis and data dissemination;
(7) mechanisms for intergovernmental climate-related studies and services...
(8) experimental climate forecast centers,...
(9) a preliminary 5-year plan,...a final 5-year plan to be submitted to the Congress...that shall be revised and extended biennially."

15 USC 2906 - Annual report.

"The Secretary shall prepare and submit to the President and the authorizing committees of the Congress, not later than January 30 of each year, a report on the activities conducted pursuant to this Act during the preceding fiscal year..."

National Aeronautics and Space Administration Authorization Act 1989 P.L. 100-685.

15 USC 2908 - Authorization for appropriations.

"...there are authorized to be appropriated to the Secretary,...not to exceed $51,000,000 for the fiscal year ending September 30, 1989, of which amount not less than $3,238,000 shall be made directly available to the National Climate Program Office..." Authorizing legislation is proposed to extend in FY 1989.

15 USC 4211 - Land Remote-Sensing Commercialization Act of 1986.

"The Secretary shall be responsible for (1) the Landsat system, including the orbit, operations, and disposition of Landsat 1,2,3,4, and 5; and (2) provision of data to foreign ground stations under the terms of agreement between the United States Government and nations that operate such ground stations which are in force on the date of commencement of the contract awarded pursuant to this title." The word "Secretary" refers to the Secretary of Commerce.

15 USC 4278 - Authorization of Appropriations.

"There are authorized to be appropriated to the Secretary $383,000,000 for fiscal year 1989

Conservation

16 USC 661 - Declaration of purpose; cooperation of agencies; surveys and investigations; donations.

"...the Secretary of Commerce is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of said sections; (2) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of said sections."

16 USC 664 - Administration; rules and regulations; availability of lands to State agencies.

"Such areas as are made available to the Secretary...shall be administered by him directly or in accordance with cooperative agreements entered into pursuant to the provisions of section 661 of this title and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife,..., as may be adopted by the Secretary...: Provided, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated:...,."

16 USC 665 - Investigations as to effect of sewage, industrial wastes; reports.

"The Secretary..., is authorized to make such investigations as he deems necessary to determine the effects of domestic sewage, mine, petroleum, and industrial wastes, erosion silt, and other polluting substances on wildlife, and to make reports to the Congress concerning such investigations and of recommendations for alleviating dangerous and undesirable effects of such pollution. These investigations shall include (1) the determination of standards of water quality for the maintenance of wildlife; (2) the study of methods of abating and preventing pollution,...; and (3) the collation and distribution of data on the progress and results of such investigations for the use of Federal, State, municipal, and private agencies, individuals, organizations, or enterprises."

Lacey Act Amendments P.L. 100-653

16 USC 742c Any Funds received in the Fisheries Loan Fund after September 30, 1986, shall be covered into the Treasury as miscellaneous receipts.

16 USC 742d - Investigations; preparation and dissemination of information; reports.

"The Secretary shall conduct...investigations, prepare and disseminate information, and make periodic reports to the public, to the President, and to Congress, with respect to the following matters:

(1) the production and flow to market of fish and fishery products...;
(2) the availability...of the biological requirements of the fish and wildlife resources;
(3) the competitive economic position of the various fish and fishery products,...;
(4) the collection and dissemination of statistics on commercial and sport fishing;
(6) the improvement of production and marketing practices...;
(7) any other matters which in the judgment of the Secretary are of public interest in connection with any phases of fish and wildlife operations."

16 USC 742f - Policies, procedures, and recommendations.

"(a) The Secretary..., shall consider and determine the policies and procedures that are necessary and desirable in carrying out...the laws relating to fish and wildlife. The Secretary,..., shall -

(1) develop and recommend measures which are appropriate to assure the maximum sustainable production of fish and fishery products...;

(2) study the economic condition of the industry, and...make such recommendations to the President and the Congress as he deems appropriate to aid in stabilizing the domestic fisheries;

(3) develop and recommend special promotional and informational activities with a view to stimulating the consumption of fishery products whenever he determines that there is a prospective or actual surplus of such products;

(4) take such steps as may be required for the development, advancement, management, conservation, and protection of the fisheries resources; and

(5) take such steps as may be required for the development, management, advancement, conservation, and protection of wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means."

16 USC 742g - International Affairs.

"The Secretary shall cooperate...with the Secretary of State in providing representation at all meetings ... relating to fish and wildlife in which ... the United States and foreign countries participate."

16 USC 744 - Investigations; fish propagation; annual statement of expenditures; investigations of damages by predacious fishes; executive assistance.

"The Secretary...shall prosecute investigations and inquiries..., with the view of ascertaining whether any and what diminution in the number of the food fishes of the coast and lakes of the United States has taken place;...what causes the same...;...whether any and what protective, prohibitory, or precautionary measures should be adopted...; and he shall submit annually to Congress...a detailed statement of expenditures...and he is authorized...to conduct investigations... for the purpose of ameliorating the damage wrought...by dogfish and other predacious fishes and aquatic animals."

16 USC 745 - Powers of Secretary.

"The Secretary...may take or cause to be taken at all times, in the waters of the seacoast of the United States,..., such fish or specimens thereof as may in his judgment, from time to time, be needful or proper for the conduct of his duties, any law, custom, or usage of any State to the contrary notwithstanding."

16 USC 753a - Cooperative research and training programs for fish and wildlife resources.

"For the purpose of developing adequate, coordinated, cooperative research and training programs..., the Secretary...is authorized...to enter into cooperative agreements with colleges and universities, with game and fish departments of the several States, and with nonprofit organizations relating to cooperative research units."

16 USC 755 - Salmon cultural stations; establishment; expenditure of funds.

"The Secretary...is authorized and directed to establish one or more salmon cultural stations in the Columbia River Basin in each of the States of Oregon, Washington, and Idaho."

16 USC 756 - Investigations, surveys, and experiments; construction and installation of conservation devices, etc.

"The Secretary...is further authorized and directed (1) to conduct such investigations...as may be necessary...of the fishery resources of the Columbia River and its tributaries; (2) to construct and install devices...for the improvement of feeding and spawning conditions..., for the protection of migratory fish from irrigation projects,...facilitating free migration of fish...and (3) to perform all other activities necessary for the conservation of fish in the Columbia River Basin in accordance with law."

Anadromous Fish Conservation Act Authorization P.L. 101-162

16 USC 757a - Anadromous and Great Lakes fisheries.

(a) Conservation, development, and enhancement; cooperative agreements with States and other non-Federal interests; terms and conditions; Federal and non-Federal costs.

"For the purpose of conserving, developing, and enhancing within the several States the anadromous fishery resources of the Nation... the Secretary...is authorized to enter into cooperative agreements with one or more States, acting jointly or severally, that are concerned with the development, conservation, and enhancement of such fish, and, whenever he deems it appropriate, with other non-Federal interests."

16 USC 757b - Anadromous and Great Lakes Fisheries; investigations, surveys, and research; stream clearance activities; conservation devices and structures; fish hatcheries; studies, recommendations, and reports to States, Congress, and Federal water resources construction agencies; water resources projects; property; acquisition, exchanges, cash equalization payments, donations, administration, and title.

"The Secretary, in accordance with any agreements entered into pursuant to section 757a(a) of this title, is authorized (1) to conduct such investigations,engineering and biological surveys, and research as may be desirable to carry out the program; (2) to carry out stream clearance activities; (3) to construct, install, maintain, and operate devices and structures for the improvement of feeding and spawning conditions,...(4) to construct, operate, and maintain fish hatcheries wherever necessary to accomplish the purposes of sections 757a to 757f of this title."

16 USC 757d - Anadromous and Great Lakes fisheries

This section authorizes funds for conservation, development and enhancement of anadromous fishery resources of the nation: $7,702,500 for fiscal year 1987, $7,920,000 for fiscal year 1988, $8,152,500 for fiscal year 1989.

16 USC 758a - Exploration, investigation, development, and maintenance of fishing resources and industry of Pacific Ocean; conduct of explorations and related work.

"The Secretary..., is authorized and directed to conduct such fishing explorations and such necessary related work as oceanographical, biological, technological, statistical, and economic studies to insure maximum development and utilization of the high seas fishery resources of the United States and its island possessions in the tropical and subtropical Pacific Ocean..."

16 USC 760a - Atlantic Coast fish study for development and protection of fish resources.

"The Secretary...is directed to undertake a comprehensive and continuing study of species of fish of the Atlantic Coast, including bays, sounds, and tributaries, for the purpose of recommending... measures for the development and protection of such resources and their wisest utilization..."

16 USC 760d - Grants for education and training of personnel in the field of commercial fishing; apportionment; authorization of appropriations; regulations.

"(a) The Secretary...is authorized to make grants, out of funds appropriated for the purposes of this section, to public and non-profit private universities and colleges in the several States and Territories of the United States for such purposes as may be necessary to promote the education and training of professionally trained personnel (including scientists, technicians, and teachers) needed in the field of commercial fishing."

Atlantic Striped Bass Conservation Act P.L. 100-589

16 USC 760e - Study of migratory game fish; waters; research; purpose.

"The Secretary...is directed to undertake a comprehensive continuing study of the migratory marine fish of interest to recreational fishermen...The study shall include...research on migrations, identity of stocks, growth rates,...for the purpose of developing wise conservation policies and constructive management activities."

16 USC 760f - Authorization to acquire facilities, employ officers and employees, cooperate with State and other agencies, and to publish results.

"...the Secretary is authorized (1) to acquire lands, construct ...buildings,...acquire equipment...employ...officers and employees... (2)...contract with State and other institutions... (3) make public the results of...research pursuant to section 760e..."

16 USC 760g - Authorization of appropriations.

"There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of sections 760e to 760g for fiscal years 1988 through 1991." Legislation limits appropriations to $2,700,000 in any fiscal year.

16 USC 760h - Shellfisheries research center; establishment; purpose.

"The Secretary...is authorized and directed to construct at Milford, Connecticut, a research center for shell fisheries production and for such purpose acquire such real property as may be necessary. Such research center shall consist of research facilities, a pilot hatchery including rearing tanks and ponds, and a training school, and shall be used for the conduct of basic research on the physiology and ecology of commercial shellfish, the development of hatchery methods for cultivation of mollusks, including the development of principles that can be applied to the utilization of artificial and natural salt water ponds for shellfish culture, and to train persons in the most advanced methods of shellfish culture."

16 USC 777 - Cooperation between Federal government and State fish and game departments; conditions on expenditure of funds.

"The Secretary...is authorized and directed to cooperate with the States through their respective State fish and game departments in fish restoration and management projects as hereinafter set forth:..."

16 USC 778 - Establishment of experiment stations; purpose of research.

"The Secretary...is authorized and directed to establish an experiment station or stations for the purpose of carrying on a program of research and experimentation-

(1) to determine species of fish most suitable for culture on a commercial basis in shallow reservoirs and flooded rice lands;

(2) to determine methods for production of fingerling fishes for stocking in commercial reservoirs;

(3) to develop methods for the control of parasites and diseases of brood fishes and of fingerlings prior to stocking;

(4) to develop economical methods for raising the more desirable species of fishes to a marketable size;

(5) to determine, in cooperation with the Department of Agriculture, the effects of fish-rice rotations, including crops other than rice commonly grown on rice farms, upon both the fish and other crops; and

(6) to develop suitable methods for harvesting the fish crop and preparing it for marketing, including a study of sport fishing as a means of such harvest."

Marine Mammal Protection Act P.L. 99-659 Amendment

16 USC 916j - Administration of enforcement provisions.

"(a) The Secretary...is authorized and directed to administer and enforce all of the provisions of this chapter and regulations issued pursuant thereto and all of the provisions of the convention and of the regulations of the Commission, except to the extent otherwise provided for in this chapter, in the convention, or in the regulations of the Commission." (in re: Chapter 14 - Regulation of Whaling)

The word "convention" refers to the International Convention for the Regulation of Whaling. The word "Commission" refers to the International Whaling Commission.

16 USC 959 - Enforcement of chapter.

(b) Federal law enforcement agents.

"Enforcement of the provisions of this chapter and the regulations issued pursuant thereto shall be the joint responsibility of the United States Coast Guard, the United States Department of Commerce, and the United States Bureau of Customs." (In re: Chapter 16 - Tuna Conventions)

16 USC 971h - Atlantic Tunas Convention Act of 1975

This section authorizes funds for 1986, 1987, 1988 and 1989 for a program for the conservation of the Atlantic tunas in support of recommendations made by the International Commission for the Conservation of Atlantic Tunas.

16 USC 1027 - Enforcement; boarding and inspecting of vessels; detention of persons and vessels; enforcement officers as witnesses.

"(a) The provisions of the Convention and this chapter relating to abstention from fishing in certain areas by the nationals and vessels of one or more of the contracting parties shall be enforced by the Coast Guard in cooperation with the Fish and Wildlife Service and the Bureau of Customs." (In re: Chapter 19 - North Pacific Fisheries)

The word "Convention" refers to the International Convention for the High Seas Fisheries of the North Pacific Ocean. The functions referred to were transferred from the Fish and Wildlife Service to NOAA by Reorganization Plan No. 4 of 1970.

16 USC 1222 - General study and inventory of estuaries and their natural resources.

(a) Estuaries included; considerations; other applicable studies.

"The Secretary of Commerce,..., shall conduct directly or by contract a study and inventory of the Nation's estuaries, including without limitation coastal marshlands, bays, sounds, seaward areas, lagoons, and land and waters of the Great Lakes. For the purpose of this study, the Secretary shall consider, among other matters, (1) their wildlife and recreational potential, their ecology, their value to the marine, anadromous, and shellfisheries and their esthetic value, (2) their importance to navigation, their value for flood, hurricane, and erosion control, their mineral value, and the value of submerged lands underlying the waters of the estuaries, and (3) the value of such areas for more intensive development for economic use as part of urban developments and for commercial and industrial developments."

16 USC 1371 Marine Mammal Protection Act of 1988 P.L. 100-711.

"The Secretary ... is authorized and directed ... to waive the requirements of this section so as to allow the taking or importing of any marine mammal product ... "

16 USC 1377 - Enforcement.

(a) Utilization of personnel.

"Except as otherwise provided in this subchapter, the Secretary shall enforce the provisions of this subchapter. The Secretary may utilize, by agreement, the personnel, services, and facilities of any other Federal agency for purposes of enforcing this subchapter." (In re: Chapter 31 - Marine Mammal Protection)

16 USC 1380 - Marine mammal research grants.

"(a) The Secretary is authorized to make grants, or to provide financial assistance in such other form as he deems appropriate, to any Federal or State agency, public or private institution, or other person for the purpose of assisting such agency, institution, or person to undertake research in subjects which are relevant to the protection and conservation of marine mammals, and shall require the government of any intermediary nation from which yellow fin tuna or tuna products will be exported to the United States to certify and provide reasonable proof that the products are banned under the section for as long as the ban is in effect.

16 USC 1381 - Commercial fisheries gear development.

(a) Research and development program.

"The Secretary of the department in which the National Oceanic and Atmospheric Administration is operating...is hereby authorized and directed to immediately undertake a program of research and development for the purpose of devising improved fishing methods and gear so as to reduce to the maximum extent practicable the incidental taking of marine mammals in connection with commercial fishing."

16 USC 1384 - Authorization of appropriations - P.L. 100-711.

"(a) There are authorized to be appropriated...$12,250,000 for fiscal year 1989, $12,740,000 for fiscal year 1990, $13,250,000 for fiscal year 1991, $13,780,000 for fiscal year 1992, $14,331,000 for fiscal year 1993.

Coastal Zone Management Reauthorization Act of 1985 P.L. 99-272

16 USC 1432 - Designation of sanctuaries.

(a) Secretary of Commerce; consultation; proposed designations.

"The Secretary,..., may designate as marine sanctuaries those areas of the ocean waters, as far seaward as the outer edge of the Continental Shelf..., of other coastal waters where the tide ebbs and flows, or of the Great Lakes and their connecting waters, which he determines necessary for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or esthetic values."

16 USC 1452 - Administrative grants.

(a) "The Secretary may make grants to any coastal state the purpose of administering that state's management program..."

16 USC 1456a - Coastal energy impact program.

(b) (1) "The Secretary shall make grants annually to coastal states, in accordance with the provisions of this subsection."

16 USC 1461 - National Estuarine Reserve Research System

"(a) Establishment of the system..."

"(b) ...the Secretary may designate an estuarine area as a national estuarine reserve if (1) the Governor of the coastal State ... nominates the area for that designation; and (2) the Secretary finds that (A) the area is a representative estuarine ecosystem that is suitable ...; (B) the law of the coastal State provides long-term protection for reserve resources ...; (C) designation of the area as a reserve will serve to enhance public awareness...; and (D) the coastal State... has complied with the requirements of any regulations issued by the Secretary..."

"(c) ... The Secretary shall develop guidelines for the conduct of research within the System ..."

"(d) ... The Secretary shall take such action as is necessary to promote and coordinate the use of the System for research purposes..."

"(e) ... (1) The Secretary may ... make grants (A) to a coastal State (i) for purposes of acquiring ... lands and waters ..., (ii) for purposes of operating or managing a national estuarine reserve and constructing appropriate reserve facilities, or (iii) for purposes of conducting educational or interpretive activities; and (B) to any coastal State or public or private person for purposes of supporting research and monitoring within a national estuarine reserve ..."

"(3)(A) The amount of the financial assistance provided ... with respect to the acquisition of land or waters ... for any one national estuarine reserve may not exceed an amount equal to 50 per centum of the costs of the lands, waters, and interests therein or $4,000,000, whichever amount is less. (B) The amount of the financial assistance provided under paragraph (1)(A)(ii) and (iii) and paragraph (1)(B) of subsection (e) may not exceed 50 percentum of the costs incurred to achieve the purposes described in those paragraphs ..."

"(f)...The Secretary shall periodically evaluate the operation and management of each national estuarine reserve ... The Secretary may withdraw the designation of an estuarine area as a national estuarine reserve..."

16 USC 1464(a) - Authorization of appropriations

"(a) There are authorized to be appropriated

(1) such sums, $37,900,000 for the fiscal year ending September 30, 1988, $38,800,000 for the fiscal year ending September 30, 1989, and $40,600,000 for the fiscal year ending September 30, 1990, as may be necessary for grants under Sections 306 and 306A, to remain available until expended;

(2) such sums, not to exceed $1,500,000 for each of the fiscal years occurring during the period beginning October 1, 1986, and ending September 30, 1990, as may be necessary for grants under Section 309, to remain available until expended;

(3) such sums, not to exceed $4,500,000 for the fiscal year ending September 30, 1988, $5,000,000 for the fiscal year ending September 30, 1989 and $5,500,000 for the fiscal year ending September 30, 1990, as may be necessary for grants under Section 315, to remain available until expended; and,

(4) such sums, not to exceed $3,300,000 for the fiscal year ending September 30, 1988, $4,000,000 for the fiscal year ending September 30, 1989, and $4,000,000 for the fiscal year 1990, as may be necessary for administrative expenses incident to the administration to this title."

16 USC 1464(a) - Provides that all grants authorized and appropriated thereunder, except for grants authorized under Section 308(b) in 16 USC 1464(a) (3) and sums authorized for administrative expenses incident to the administration of this title in 16 USC 1464(a) (8), are to remain available until expended.

16 USC 1533 - Endangered Species Act P.L. 100-478.

"The Secretary shall by regulation determine whether any species is an endangered ... or threatened species..."

16 USC 1534 - Land acquisition.

"(a) The Secretary shall establish and implement a program to conserve (A) fish... which are listed as endangered species or threatened species ..."

16 USC 1535 - Authorization of appropriations.

"...there are authorized to be appropriated not to exceed... $5,750,000 for fiscal year 1988, $6,250,000 for each of fiscal years 1989 and 1990 and $6,670,000 for each of fiscal years 1991 and 1992.

Magnuson Fishery Conservation and Management Act.

16 USC 1811 - Exclusive Economic Zone P.L. 99-659.

The United States claims and will exercise..., sovereign rights and exclusive fishery management authority over all fish, and all Continental Shelf fishery resources, within the exclusive economic zone... all anadromous species throughout the migratory range of each species beyond the exclusive economic zone... all continental shelf fishery resources beyond the exclusive economic zone.

16 USC 1822(a)(4) - Negotiations.

"The Secretary of State shall, upon the request of and in cooperation with the Secretary, initiate and conduct negotiations for the purpose of entering into international fishery agreements..."

16 USC 1852 - Regional fishery management councils;

"There shall be established,...,eight Regional Fishery Management Councils,..."

16 USC 1852(h).

"Each Council shall.... (1) prepare ... a fishery management plan with respect to each fishery within its geographical area ...; (2) prepare comments on any application for foreign fishing ...; and (3) conduct public hearings ..." and are fairly represented as voting members of the council.

16 USC 1853 - Contents of fishery management plans.

"Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, shall - ... (2) contain a description of the fishery,..., any recreational interests in the fishery..., (3) assess and specify the present and probable future condition of..., (4) assess and specify - ..., (5) specify the pertinent data..."

16 USC 1854(e) - Fisheries research.

"The Secretary shall initiate and maintain a comprehensive program of fishery research to carry out and further the purposes, policy, and provisions of this Act. Such program shall be designed to acquire knowledge and information, including statistics, on fishery conservation and management,..."

16 USC 1855 - Staff and administration.

"The Secretary shall provide to each Council such administrative and technical support services as are necessary for the effective functioning of such Council."

16 USC 1861 - Enforcement.

"(a) The provisions of this Act shall be enforced by the Secretary and the Secretary of the department in which the Coast Guard is operating."

"(b) Any officer who is authorized...to enforce the provisions of this Act may...(A) arrest any person, if he has reason to believe that such person has committed an act prohibited...; (B) board, and search or inspect, any fishing vessel which is subject to the provisions of this Act; (C) seize any fishing vessel...used or employed in, the violation of any provisions of this Act; (D) seize any fish...taken or retained in violation of any provisions of this Act; and (E) seizeany other evidence related to any violation..."

16 USC 1882 - Authorization of Appropriations P.L. 99-659.

"There are authorized to be appropriated to the Secretary, for purposes of carrying out the provisions of this Act, not to exceed the following sums: ..,$69,000,000 for the fiscal year ending September 30, 1986; $70,800,000 for the fiscal year ending September 30, 1987; and $72,900,000 for the fiscal year ending September 30, 1988; $75,000,000 for the fiscal year ending September 30, 1989." This authorization applies to 16 USC 1811-1861.

16 USC 3633(c) - Authority and Responsibility.

"...the Secretary shall prepare, as appropriate, all statements, reports, and information required by the Treaty..."

16 USC 3636 - Rulemaking.

"(a) the Secretary,... shall promulgate such regulations as may be necessary to carry out the United States international obligations under the Treaty..."
"(b) the Secretary,... may promulgate regulations applicable to nationals or vessels of the United States..." The word "Treaty" refers to the "Pacific Salmon Treaty Act of 1985"

16 USC 3641 - Authorization of Appropriations.

"There are authorized to be appropriated from time to time such sums as may be necessary for carrying out the purposes and provisions of the Treaty..."

Fish and Seafood Promotion Act of 1986 P.L. 99-659

16 USC 4008 Establishment of Fisheries Promotional Fund.

There is established in the Treasury of the United States a Fisheries Promotional Fund. The Fund shall be available to the extent provided for in appropriation acts.

There are transferred from the fund to the Fisheries Promotion Fund $750,000 in fiscal year 1987, $3,000,000 in each of the fiscal years 1988 and 1989, and $2,000,000 in fiscal year 1990.

Mineral Lands and Mining

30 USC 1412 - Licenses for exploration and permits for commercial recovery.

"...the Administrator shall issue to applicants who are eligible therefor licenses for exploration and permits for commercial recovery." The word "Administrator" refers to the Administrator of NOAA.

30 USC 1419 - Protection of the environment.

"The Administrator shall expend and accelerate the program assessing the effects on the environment from exploration and commercial recovery activities..." "The Administrator also shall conduct a continuing program of ocean research to support environmental assessment activity through the period of exploration and recovery..."

30 USC 1424 - Federal observers.

"Each license and permit issued shall require the licensee or permittee-
(1) to allow the Administrator to place observers aboard vessels used by the licensee or permittee in exploration or commercial recovery activities (A) to monitor such activities, and (B) to report to the administrator a failure to comply with such terms, conditions, and restrictions;
(2) to cooperate in the performance of monitoring functions; and

(3) to monitor the environmental effects of the exploration and commercial recovery activities...and to submit such information as ... necessary and appropriate to assess environmental impacts and to develop and evaluate possible methods of mitigating adverse environmental effects."

30 USC 1428 Reciprocating States.

"(a) DESIGNATION. - The Administrator, in consultation with the Secretary of State and the heads of other appropriate departments and agencies, may designate any foreign nation as a reciprocating state..."

30 USC 1469 Biennial Report.

"(a) SUBMISSION OF REPORTS. - The Administrator shall submit to the Congress-

(1) ... a report on the administration of this Act during the period beginning on the date of enactment of this Act and ending September 30, 1981; and

(2) not later than December 31 of each second year thereafter, a report on the administration of this Act during the two fiscal years preceding the date on which the report is required to be filed.

(b) CONTENTS. - Each report filed pursuant to subsection (a) shall include, but not be limited to ...

(1) Licenses and permits issued, modified, revised, suspended, revoked, relinquished, surrendered, or transferred; denials of licenses and permits; denials of issuance or transfer of licenses and permits; and required suspensions and modifications of activities under licenses and permits.

(2) A description and evaluation of the exploration and commercial recovery activities undertaken, including, but not limited to, information setting forth the quantities of hard mineral resources recovered and the disposition of such resources.

(3) An assessment of the environmental impacts, including description and estimate of any damage caused by any adverse effects on the quality of the environment resulting from such activities.

(4) The number and description of all civil and criminal proceedings, including citations, instituted under this title, and the current status of such proceedings.

(5) Such recommendations as the Administrator deems appropriate for amending this Act to further fulfill its purposes."

30 USC 1470 - Authorization of Appropriations.

"There are authorized to be appropriated to the Administrator, for purposes of carrying out the provisions of titles I and II and this title, ... $1,500,000 for each of the fiscal years ending September 30, 1987, September 30, 1988, and
September 30, 1989."

Navigation and Navigable Waters

33 USC 706 - Department of Commerce; current information; appropriation.

"There is authorized an expenditure as required,..., for the establishment, operation, and maintenance by the Department of Commerce of a network of recording and non-recording precipitation stations, known as the Hydrocilmatic Network, whenever...such service is advisable..."

33 USC 853a-876 - NOAA Corps

These statutory provisions authorize the numerous functions inherent in and necessary for the maintenance of the commissioned officer corps of the National Oceanic and Atmospheric Administration. Included in these provisions are authorities pertaining to the authorized numbers in the respective permanent ranks; 'appointment and promotion of officers; retirement and separation of officers; cooperation with the transfer of officers to military departments; servicemen's and veterans' benefits; and rights, privileges, immunities and benefits of members of the commissioned corps.

Coast and Geodetic Survey

33 USC 883a - Surveys and other activities.

"...the Secretary...is authorized to conduct the following activities:

(1) Hydrographic and topographic surveys;
(2) Tide and current observations;
(3) Geodetic-control surveys;
(4) Field surveys for aeronautical charts;
(5) Geomagnetic, seismological, gravity, and related geophysical measurements and investigations."

33 USC 883b - Dissemination of data; further activities.

"...the Secretary is authorized to conduct the following activities:
(1) Analysis and prediction of tide and current data;
(2) Processing and publication of data...;
(3) Compilation and printing of aeronautical charts...;
(4) Compilation and printing of nautical charts...;
(5) Distribution of aeronautical charts...;
(6) Distribution of nautical charts..."

33 USC 883c - Geomagnetic data; collection; correlation, and dissemination.

"To provide for the orderly collection of geomagnetic data...the Secretary is authorized to collect, correlate, and disseminate such data."

33 USC 883d - Improvement of methods, instruments, and equipments; investigations and research.

"...the Secretary is authorized to conduct developmental work for the improvement of surveying and cartographic methods, instruments, and equipments; and to conduct investigations and research in geophysical sciences..."

33 USC 883e - Cooperative Agreements for Mapping and Charting Surveys.

"The Secretary of Commerce is authorized to establish the terms of any cooperative agreement entered into ... including the amount of funds to be received ... which the Secretary determines represents the amount of benefits derived ... from the cooperative agreement."

33 USC 883f - Contracts with qualified organizations.

"The Secretary is authorized to contract with qualified organizations for the performance of any part of the authorized functions of the Coast and Geodetic Survey..."

33 USC 883h - Employment of public vessels.

"The President is authorized to cause to be employed such of the public vessels as he deems it expedient to employ, and to give such instructions for regulating their conduct as he deems proper in order to carry out the provisions of sections 883a to 883i of this title."

33 USC 883i - Authorization of Appropriations.

"There are authorized to be appropriated such funds as may be necessary to acquire, construct, maintain, and operate ships, stations, equipment, and facilities and for such other expenditures, including personal services at the seat of government and elsewhere and including the erection of temporary observatory buildings and lease of sites therefore as may be necessary..."

33 USC 1121 - National Sea Grant College Program Act.

"The Sea Grant Act authorizes the awarding of grants and contracts to initiate and support programs at Sea Grant colleges and other institutions for research, education, and advisory services in any field related to the conservation and development of marine resources."

The authorization for appropriation expires at the end of FY 1990.

33 USC 1130 Marine Affairs and Resource Management Improvement Grants.

The Under Secretary may make grants and enter into contracts to carry out the strategic research program. A grant or contract may cover up to 100 percent of the cost of the research. Within 1 year after the effective date of the Marine Science Technology, and Policy Development Act of 1987, and every 3 years after that date, the Under Secretary shall develop and publish in the Federal Register, a Sea Grant Strategic research plan for the next 3 years.

33 USC 1131 Authorization of Appropriations.

There is authorized to be appropriated not to exceed $41,500,000 for fiscal year 1988, not to exceed $50,500,000 for fiscal year 1989, not to exceed $51,000,000, for fiscal year 1990.

Marine Protection, Research and Sanctuaries Act Amendments P.L. 99-272

33 USC 1441 - Monitoring and research program; reports to Congress.

"The Secretary of Commerce, in coordination with the Secretary of the Department in which the Coast Guard is operating and with the Administrator shall, initiate a comprehensive and continuing program of monitoring and research regarding the effects of the dumping of material into ocean waters or other coastal waters where the tide ebbs and flows or into the Great Lakes or their connecting waters.

33 USC 1442 - Research program respecting possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems.

(a) Secretary of Commerce.

"The Secretary...,...shall,..., initiate a comprehensive and continuing program of research with respect to the possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems."

33 USC 1443 - Cooperation with public authorities, agencies, and institutions, private agencies and institutions, and individuals.

"The Secretary...shall conduct and encourage, cooperate with, and render financial and other assistance to appropriate public... authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and to promote the coordination of, research, investigations, experiments, training, demonstrations, surveys, and studies for the purpose of determining means of minimizing or ending all dumping of materials within five years of the effective date of this Act."

33 USC 1444 - Authorization of appropriations.

"There are authorized to be appropriated...not to exceed $11,114,000 for fiscal year 1989.

National Ocean Pollution Planning Act of 1978 P.L. 100-636

33 USC 1701 - National Ocean Pollution Program Office and National Ocean Pollution Policy Board.

is further amended to establish the National Ocean Pollution Policy Board.

33 USC 1703 - Comprehensive Federal Plan Relating to Ocean Pollution.

"The Under Secretary...shall establish within the administration the National Ocean Pollution Program Office. The Office shall make general research on marine ecosystems including the Great Lakes. The Chesapeake Bay, Puget Sound, and other Estuaries of National significance.

33 USC 1704 - Comprehensive Ocean Pollution Program in the Administration.

"The Under Secretary shall establish within the Administration a comprehensive, coordinated and effective ocean pollution research and development and monitoring program."

33 USC 1705 - Grants and contracts.

"The Under Secretary may provide financial assistance...of grants or contracts for research and development and monitoring projects or activities...to meet priorities set forth in the Plan..."

33 USC 1707 - Dissemination of Information.

Amended by adding: "The Under Secretary shall ensure that the findings and information regarding ocean pollution research activities associated with the Great Lakes ... be disseminated in a timely manner and in useful forms to ... the Federal Government, State governments, and other persons with an interest ..."

33 USC 1709 - Authorization of Appropriations.

"There are authorized to be appropriated to the Under Secretary for the purposes of carrying out this Act not to exceed $3,750,000 for the fiscal year 1989 not to exceed $4,000,000 for fiscal year 1990.

Pay and Allowances for Members of Uniformed Services

37 USC 101 et seq. - Pay and Allowances for Members of the Uniformed Services.

Authorizes pay and allowances for members of the NOAA Commissioned Officers Corps.

Public Health and Welfare

42 USC 1891 - Authorization to make grants.

"The head of each agency of the Federal Government, authorized to enter into contracts for basic scientific research at nonprofit institutions of higher education, or at nonprofit organizations whose primary purpose is the conduct of scientific research, is authorized, where it is deemed to be in furtherance of the objectives of the agency, to make grants...for the support of such...research."

42 USC 7453 - The Clean Air Act.

"(f) (2) Members of the Coordinating Committee shall include the appropriate official responsible for the relevant research efforts of ...
(A) The National Oceanic and Atmospheric Administration ...
(f) (3) The Coordinating Committee shall review and comment on plans for, and the execution and results of, pertinent research and studies..."

42 USC 7454 - The Clean Air Act.

"(a) The Administrator of the National Oceanic and Atmospheric Administration shall establish a continuing program of research and monitoring of the stratosphere for the purposes of early detection of changes in the stratospheric and climatic effects of such changes..."

42 USC 8902 - Interagency Task Force; Comprehensive Program.

"(a) There is hereby established a comprehensive ten-year program to carry out the provisions of this subtitle; and to implement this program there shall be formed an Acid Precipitation Task Force (hereafter in this subtitle referred to as the "Task Force"), of which the Secretary of Agriculture, the Administrator of the Environmental Protection Agency, and the Administrator of the National Oceanic and Atmospheric Administration shall be joint chairmen."

"(c) The Administrator of the National Oceanic and Atmospheric Administration shall serve as the director of the research program established by this subtitle."

42 USC 8903 - Comprehensive Research Plan.

"(a) The Task Force shall prepare a comprehensive research plan for the ten-year program (hereafter in this subtitle referred to as the "comprehensive plan"), setting forth a coordinated program (1) to identify the causes and effects of acid precipitation and (2) to identify actions to limit or ameliorate the harmful effects of acid precipitation."

"(c) The comprehensive plan--

(1) shall be submitted in draft form to the Congress, and for public review, within six months after the date of the enactment of this Act;

(2) shall be available for public comment for a period of sixty days after its submission in draft form under paragraph (1);

(3) shall be submitted in final form, incorporating such needed revisions as arise from comments received during the review period, to the President and the Congress within forty-five days after the close of the period allowed for comments on the draft comprehensive plan under paragraph (2); and

(4) shall constitute the basis on which requests for authorizations and appropriations are to be made for the nine fiscal years following the fiscal year in which the comprehensive plan is submitted in final form under paragraph (3)."

42 USC 8904 - Implementation of the Comprehensive Plan.

"(a) The comprehensive plan shall be carried out during the nine fiscal years following the fiscal year in which the comprehensive plan is submitted in its final form under section 704(c)(3); and..."

42 USC 8905(e) - Authorization of Appropriations.

"(a) For the purpose of establishing the Task Force and developing the comprehensive plan under section 704 there is authorized to be appropriated to the National Oceanic and Atmospheric Administration for fiscal year 1981 the sum of $5,000,000, to remain available until expended.

(b) Authorizations of appropropriations for the nine fiscal years following the fiscal year in which the comprehensive plan is submitted in final form under section 704(c)(3), for purposes of carrying out the comprehensive ten-year program established by section 703(a) and implementing the comprehensive plan under sections 704 and 705, shall be provided on an annual basis in authorization Acts hereafter enacted; but the total sum of dollars authorized for such purposes for such nine fiscal years shall not exceed $45,000,000 except as may be specifically provided by reference to this paragraph in the authorization Acts involved."

Public Lands

43 USC 1347(e) - Safety Regulations.

"The Secretary... shall conduct studies of underwater diving techniques and equipment suitable for protection of human safety and improvement of diver performance. Such studies shall include, but need not be limited to, decompression and excursion table development and improvement and all aspects of diver physiological restraints and protective gear for exposure to hostile environments."

Public Printing and Documents

44 USC 1307 - Sale and Distribution of NOAA Nautical and Aeronautical Products.

"All nautical and aeronautical products created or published ... shall be sold at ... prices ... the Secretary of Commerce shall establish annually ... so as to recover all costs attributable to data base management, compilation, printing, and distribution of such products."

69 App USC 1153 - Training of foreign nationals in aeronautical and related subjects.

"Subject to the concurrence of the Secretary of State, the Secretary of Transportation, and the Secretary of Commerce, within their respective fields, are authorized within or outside the United States to train foreign nationals directly, or in conjunction with any other United States Government agency, or through any United States public or private agency..., or through any international organization, in aeronautical and related subjects essential to the orderly and safe operation of civil aircraft."

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Mapping, Charting, and Geodesy:											
Mapping and Charting..............	Pos./BA	293	27,867	293	30,167	293	31,306	293	31,206	0	(100)
	FTE/Obl.	302	27,867	302	30,167	302		302		0	
Geodesy............................	Pos./BA	218	17,395	218	17,720	218	18,141	218	15,728	0	(2,413)
	FTE/Obl.	226	17,395	226	17,720	226		226		0	
Total	Pos./BA	511	45,262	511	47,887	511	49,447	511	46,934	0	(2,513)
	FTE/Obl.	528	45,262	528	47,887	528		528		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Mapping, Charting, & Geodesy											
Mapping and Charting........	FTE/obl.	399	36,738	399	36,821	399	36,821	399	36,614	0	(207)
Geodesy.....................	FTE/obl.	63	4,607	63	5,190	63	5,190	63	4,710	0	(480)
Reimbursable obligations	FTE/obl.	462	41,345	462	42,011	462	42,011	462	41,324	0	(687)

Justification of Program and Performance

Activity: National Ocean Service
Subactivity: Mapping, Charting, and Geodesy

Goals and Objectives

Goals: To provide accurate and timely marine, coastal, and aeronautical data in various map and chart formats; to increase the efficiency and safety of marine and air transportation, offshore engineering, exploration of the Exclusive Economic Zone (EEZ), coastal zone management, military operations, and recreational activities; to provide the National Geodetic Reference Systems needed for accurate geographic positions, elevations and gravity values for national defense and space activities, mapping and charting, public works, land information management and earth science investigations.

Objectives: The mapping and charting program objectives are to: (1) Conduct hydrographic, photogrammetric and high resolution EEZ surveys; (2) Process data and access information affecting marine and air transportation, maintain current aeronautical and nautical chart data bases, and compile, reproduce and distribute nationwide nautical and aeronautical charts, EEZ and coastal zone maps; (3) Automate cartographic and photogrammetric operations; and (4) Design, develop and evaluate improved data acquisition, processing, cartographic, and dissemination systems, and new digital products. For geodesy, the objectives are to: (1) Incorporate the recent backlog of surveys into the redefined North American Datum (NAD 83) and complete the horizontal network in deficient and unsurveyed areas; (2) Relevel and readjust the North American Vertical Datum (NAVD 88) and complete the vertical network in deficient and unsurveyed areas; (3) Provide accurate geodetic data for crustal motion studies; (4) Transfer geodetic technology to Federal, state, and local governments and the private sector; and (5) Apply Global Positioning System (GPS), Very Long Baseline Interferometry (VLBI), and Satellite Altimetry to improve the measurement and understanding of geodetic parameters and dynamic earth processes such as polar motion, earth rotation, gravity field and the geoid, global sea level and ocean circulation.

Base Program

Mapping and Charting -- Hydrographic surveys provide the basic data for the production of nautical charts. In FY 1991, hydrographic surveys and special investigations of wrecks and obstructions will be conducted using ships and field parties. A total of about 55 surveys will be completed. These surveys will be conducted in high priority areas as identified by the automated Survey Request File (SURF) system. New automated Hydrographic Data Acquisition and Processing Systems (HDAPS), installed aboard the hydrographic survey ships and launches during FY 1989 and FY 1990 should result in continued productivity improvements in FY 1991. Aircraft will be deployed on photogrammetric surveys to support new chart compilations, the revision of existing charts, and the delineation of baseline data for U.S. marine boundaries. EEZ surveys using multibeam equipment will be conducted in high priority areas.

Data from both government and private sources are used to update nautical charts. Approximately 50,000 of these source documents will be evaluated and applicable data plus the survey data will be incorporated into the Nautical Chart System data base. In FY 1991, 380 revised nautical charts will be issued. Digital data will be provided in addition to dissemination of charting data in analog format. Aeronautical charts are compiled from qualified data and disseminated for the National Airspace System in accordance with strict updating schedules set by the Federal Aviation Administration. During FY 1991, 10,341 new and revised aeronautical charts will be maintained. In response to the Presidential proclamation, extending sovereign rights for development of natural resources in the EEZ, 20 high resolution bathymetric maps will be produced.

Efforts will continue to develop the next generation automated nautical charting system and to improve photogrammetric processing with an integrated digital photogrammetric facility. Efforts will continue to automate aeronautical cartography. Although similarities exist between automated efforts in both nautical and aeronautical charting, each has unique requirements which can best be met by somewhat different approaches. These systems incorporate state-of-the-art technology and will increase efficiencies and improve the quality of the output. Rapid advances in computer technology, electronic chart hardware, and portable mass storage media have created a demand for digital chart data. New formats will be designed based on the digital optical disk and other systems.

Legislation will be proposed to permit the Nautical Charting program, as well as other ocean related programs, to be financed from a Harbor Maintenance Trust Fund transfer to the proposed Marine Waterways Trust Fund. The Harbor Maintenance Trust Fund was established by P.L. 99-662, Title XIV and derives its revenue from a user fee on commercial cargo. The proposed legislation will increase the fee to provide the necessary additional revenues to finance these programs. Under this proposal, the Nautical Charting program would be funded by a reimbursement to the OR&F account from the Marine Waterways Trust Fund.

Geodesy - The horizontal surveys backlog will be processed and entered into the National Geodetic Reference Data Base. This process includes surveys performed using GPS technology. This technology will be employed to aid states and local areas in completing the horizontal control network. New NAD 83 coordinates and descriptions will continue to be published and distributed. Releveling will continue for NAVD 88 to correct vertical network deficiencies. Activities have begun in preparation for the final adjustment of the NAVD 88 project. The use of GPS to determine vertical control will continue to be studied.

Crustal motion surveys will be conducted on a cooperative basis for earthquake prone areas, fault zones, emergency fuel storage sites, and locations for geothermal energy development. This task depends on other geodetic projects (NAD 83, NAVD 88, and polar motion) and is carried out using conventional leveling techniques, mobile VLBI equipment, and GPS.

The Geodetic Advisory Service now in operation for 26 states will continue at that level in FY 1991. Other technology transfer programs will continue through regional geodetic coordination and calibration baseline services. The transfer of GPS technology to state and local governments, universities, and the private sector will continue.

NOAA will continue its leadership role in the application of VLBI to geodesy by serving as the operational center for international cooperation; processing data to monitor polar motion, earth rotation; and determining baseline vectors and other parameters that can be applied to geodynamic investigations. Satellite altimetry data will be processed to produce time series of sea level, improved tide models, global surface circulation, wind speed, and wave height. Research will continue in crustal motion, improvements in GPS techniques for high precision static and kinematic surveys.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Aeronautical visual charts, number maintained	182	182	182
Aeronautical instrument charts, number maintained	9,559	9,538	10,159
Nautical charts, number maintained	981	981	981
Nautical charts, number revised	427	380	380
Coast pilots, volumes revised	8	8	8
Photogrammetric shoreline charts revised	45	45	45
Airport obstruction charts, number maintained	837	837	847
Airport obstruction charts, number revised	150	150	180
Kilometers of releveling completed for the NAVD 88 project	3,474	2,500	0
Kilometers of releveling completed to correct network deficiencies	0	700	3,200
NAVD 88 block validation (points)	119,700	44,000	*
Crustal motion network sites surveyed by VLBI	20	20	20
GPS stations occupied	2,200	2,200	2,200
VLBI network observing sessions	70	70	70
States receiving advisory service	24	26	26

* Activity completed

Decreases for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Mapping and Charting	Pos./BA	293	$31,306	293	$31,206	0	-$100
	FTE/Obl.	302		302		0	

A decrease of $100,000 (object class 25.0) is requested for the Great Lakes shoreline mapping plan. As the plan will be completed in FY 1990, no funding is required in FY 1991.

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Geodesy	Pos./BA	218	$18,141	218	$15,728	0	-$2,413
	FTE/Obl.	226		226			

Two decreases totalling $2,413,000 are requested in this line item.

A decrease of $577,000 is requested for the South Carolina Cooperative Geodetic Survey Program. This program was initiated in 1979 as a Congressional add-on (South Carolina Multipurpose Mapping Project). The geodetic work is almost complete and additional mapping needs should be completed by the State. This is a specific State, not Federal, concern which benefits local private companies and should be the funding responsibility of the State or those companies. State personnel have been trained by NOAA to complete the tasks necessary to fulfill their mapping needs.

A decrease of $1,836,000 is requested for the Land Information System for Orleans, Calcasieu, and Jefferson Parishes in Louisiana. The program was initiated as a Congressional add-on in FY 1988 (The Multipurpose Cadaste Project). The work is now underway and can be turned over to the State to fund completion of the project. This project serves no Federal purpose and should be funded by the State which is the direct beneficiary.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Mapping, Charting & Geodesy
Program Change: South Carolina Cooperative Geodetic Survey (Multipurpose Mapping Project)

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(47)
22	Transportation of things	(2)
23.2	Rental payments to others	(14)
24	Printing and reproduction	(5)
25	Other services	(434)
26	Supplies and materials	(15)
31	Equipment	(60)
99	Direct obligations	(577)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Mapping, Charting & Geodesy
Program Change: Land Information System (Multipurpose Cadastre)

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(223)
22	Transportation of things	(2)
23.2	Rental payments to others	(1)
24	Printing and reproduction	(111)
25	Other services	(30)
26	Supplies and materials	(1,469)
99	Direct obligations	(1,836)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Observation and Assessment:											
Observation and Prediction........	Pos./BA	191	14,554	191	16,622	191	16,991	188	16,865	(3)	(126)
	FTE/Obl.	197	14,647	197	16,639	197		194		(3)	
Estuarine and Coastal Assessment...	Pos./BA	125	16,209	128	18,872	128	19,084	127	17,184	(1)	(1,900)
	FTE/Obl.	129	16,209	132	18,872	132		131		(1)	
Coastal Ocean Science..............	Pos./BA	0	0	13	6,400	13	6,369	14	17,369	1	11,000
	FTE/Obl.	0	0	10	6,400	10		11		1	
Total	Pos./BA	316	30,763	332	41,894	332	42,444	329	51,418	(3)	8,974
	FTE/Obl.	326	30,856	339	41,911	339		336		(3)	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Observation and Assessment Observation and Prediction.....	FTE/obl.	3	874	3	952	3	952	3	753	0	(199)
Estuarine and Coastal Assessment..................	FTE/obl.	32	7,027	32	4,857	32	4,857	32	4,857	0	0
Reimbursable obligations	FTE/obl.	35	7,901	35	5,809	35	5,809	35	5,610	0	(199)

Justification of Program and Performance

Activity: National Ocean Service
Subactivity: Observation and Assessment

Goals and Objectives

Goals: Provide timely and accurate marine observations and predictions for safe and efficient operations in the oceans, coastal areas, estuaries and Great Lakes. Provide improved marine data products and services to specific user communities, and develop cooperative efforts with other Federal agencies. Support the Federal responsibility to provide improved observations, collections, national products, warnings and advisories based on oceanographic and marine atmospheric data for use in forecast models. Develop, through monitoring, research and assessment, an understanding of marine and estuarine resources and environments and the changes that result from human activities. Produce a scientific basis for Federal management decisions associated with the protection, development and use of ocean, estuarine and coastal resources.

Objectives: Improve the quality, quantity, geographic coverage and timeliness of oceanic and related atmospheric observations; improve and centralize acquisition and analysis of ocean data to support operational needs and numerical forecast models for both oceanic and coastal areas facilitate state-of-the-art data storage and processing facilities and obtain sufficient ground truth surface observations to support the effective use of satellite-derived ocean observations. Replace existing obsolete water level gauges with state-of-the-art real-time telemetry systems. Describe and predict total circulation in selected estuaries through the use of numerical modeling techniques that minimize field operations. Provide tidal datums for support of nautical charting and for determination of Federal, state and offshore marine boundaries; work with private sector firms to encourage development of products to meet the needs of marine products users. Organize public/private partnerships for developing effective delivery of services at minimum or no cost to the Federal government; provide technical assistance to public and/or private organizations establishing real-time navigation systems for the maritime industry. Develop an operational capability for the analysis of marine and estuarine environmental quality problems; conduct physical, chemical, and biological monitoring at selected sites to describe and predict the environmental quality conditions of coastal and estuarine areas; conduct intercomparison exercises to document laboratory comparability and assure the quality of marine environmental quality measurements; conduct interdisciplinary studies of environmentally-stressed marine ecosystems and estuaries to enhance our abilities to predict the effects of human activities. Provide scientific information during response to spills of oil and hazardous materials and assess long-term environmental damage caused by these spills; cooperate with states to develop natural resources information systems for U.S. coastal wetlands; improve interagency coordination of marine pollution research, development and monitoring programs supported by the Federal Government, including the Great Lakes and estuaries of national significance. Finally, and promote dissemination of data and information pertaining to marine, estuarine and Great Lakes pollution issues.

Base Program

Observation and Prediction -- The Ocean Services Program was established to provide the required infrastructure for access to ocean observations, products, and information. In addition, the Program's mission is to improve the prediction of physical changes in the ocean by: (1) increasing the number and improving the quality of oceanographic and meteorological observations; (2) improving the capacity to analyze, model, and predict ocean processes at the three National Centers --the Navy-NOAA Joint Ice Center in Suitland, MD, the NOAA Ocean Products Center at Camp Springs, MD, and the NOAA Ocean Analysis & Prediction in Monterey, CA; and (3) increasing and improving intra-agency and inter-agency coordination in coastal and global ocean data collection, analysis, and prediction. The Program provides integrated observing networks for the Nation's coastal and global oceans, and develops and implements innovative tools for environmental forecasting. The program's infrastruture provides vital support for: NOAA's Marine Weather activities, Living Marine Resource Management activities, Coastal Ocean Program, Climate & Global Change Program, and Data Management Program. The Ocean Services Program provides information access to a wide range of users, including: industry, commercial fishing, marine transportation, offshore oil & gas; private forecasting and value-added companies; Federal and state resource management agencies; and the research community.

National Water Level Observation -- NOAA operates a national water level observation program that includes long-and short-term stations in the coastal oceans (U.S. coasts, territories, and possessions), and the Great Lakes. The core of the program is the continuously operating National Water Level Observation Network. The program supports: (1) other NOAA activities (nautical charting, tide prediction, tsunami warning, storm surge warning, circulation modeling, tidal and Great lakes datum determinations, monitoring long-term sea level trends, climate and global change); (2) other Federal agencies (Department of Justice for regulatory and marine boundary disputes; Army Corps of Engineers and EPA for coastal construction, permitting, and dredging activities); and (3) state and private concerns (marine boundary, real-time navigation, and oceanographic research projects).

During FY 1991, installation of the Next Generation Water Level Measurement System will continue. Existing systems will be replaced with automated, satellite-telemetered systems. These new systems also include the capability of measuring ancillary meteorological and oceanographic parameters in near real-time. Existing personnel-intensive data processing, analysis and management systems will be replaced by a state-of-the-art data base management and dissemination system.

Annual products include:

Tidal Information with hourly heights, daily high and low tidal heights, monthly and annual mean summaries, harmonic and non-harmonic constants for approximately 150 operating and 6,200 historical locations; tidal datums and bench mark elevations for some 5,000 locations; surface temperature and density data from approximately 75 operating stations; near real-time water level data from 29 stations; and data from 25 new stations equipped with Next Generation Water Level Measurement Systems in the Atlantic and Pacific Oceans to support NOAA's Global and Climate Change Program.

Great Lakes Water Level Information with hourly levels, daily mean levels from 50 operating and 175 historical stations, annual water levels, 7-day telemetered water levels, monthly maximum and minimum levels from the 50 operating stations, annual lake discharge information, monthly flow information and monthly precipitation summaries from over 900 U.S. and Canadian locations; near real-time water level data from 24 stations; and International Great Lakes datum elevations for all locations.

Estuarine Modeling and Prediction -- Application of numerical estuarine circulation models will result in a new suite of circulation products and services and reduce the number of required field observations. Model development and circulation atlases will be completed for Long Island Sound and Charleston Harbor. Circulation measurement projects will begin in the Gulf of Mexico and data for circulation atlases will be obtained in those estuaries. Data for estuarine and coastal regions (current direction and velocity vs. depth, temperature and salinity profiles, water levels, and meteorological data) will be provided to users.

Tide Prediction Tables, published in four volumes. Contains daily high and low water predictions for 6,200 locations one year in advance.
Tidal Current Predictions, published in two volumes. Contains predictions at 56 major ports and 2,600 coastal locations.
Tidal Current Charts and Diagrams for 12 coastal areas.

Special Predictions for NWS and foreign countries.

Estuarine and Coastal Assessment -- Under the authority of Title II of the Marine Protection, Research, and Sanctuaries Act (P.L. 92-532) and Section 6 of the National Ocean Pollution Planning Act (P.L. 95-273), NOAA conducts a comprehensive and continuing national program of research and monitoring on the long-range effects of human activities on the marine environment. Program priorities are set in part by national needs outlined in the National Marine Pollution Program Plan. A critical element of this effort, being addressed through NOAA's National Status and Trends Program, is the development of a body of reliable information on spatial and temporal variations of estuarine and oceanic and environmental quality conditions. Major aspects of this program include a collection and analysis of the ambient concentrations of toxic synthetic organics and trace elements in mussels and sediments at 180 stations throughout the Nation's coastal and estuarine areas, similar measurements in bottomfish and sediments at 35 additional stations, and intensive surveys of the magnitude and extent of pollution in areas of great concern, e.g., Boston Harbor, San Francisco Bay, and Prince William Sound.

The program's purpose is to provide highly reliable data on concentrations of toxic chemicals in the Nation's estuaries to assess the long-term impact of those contaminants on environmental quality and to identify strategies for maintaining or improving environmental quality in these important areas. Because of increasing interest in the development of the resources of the Exclusive Economic Zone (EEZ), priority has been placed on the production of information products and services for the resolution of potential conflicts among uses of those resources, including the marine environmental quality resource.

Because of the ecological and economic importance of estuarine areas, NOAA is developing a unique national assessment capability that focuses on those areas. In addition, Executive Order 12316 designates the Secretary of Commerce as one of the Federal "public trustees" for natural resources with the responsibility for recovering damages to marine resources under the Comprehensive Environmental Response, Compensation, and Liability Act, and the Clean Water Act. To assist the Secretary in fulfilling this trusteeship responsibility, NOAA conducts a number of studies of the risks from toxic discharges of oil and hazardous materials from "Superfund" hazardous waste dump sites and from spills of oil and hazardous materials into estuarine and coastal areas of the Nation.

The following additional ocean assessment activities are conducted under this line item:

- Publication of a series of atlases on four major regions of the U.S. Exclusive Economic Zone containing available information on important physical, biological, and economic characteristics - - the Gulf of Mexico Data Atlas was completed in FY 1985; the Bering, Chukchi, and Beaufort Seas Data Atlas was completed in FY 1988, West Coast and Gulf of Alaska Data Atlas will be completed in FY 1990; and revision of the prototype East Coast Data Atlas, originally completed in 1979, will be revised in FY 1990.

- Maintenance and update of the National Coastal Pollutant Discharge Inventory, a national data base of 17 types of pollutant discharges from about 10,000 point sources, 1,200 urban areas, 300 U.S. Geological Survey cataloging units, and 175 rivers throughout coastal areas of the United States.

- Maintenance and continued development of a national data base on the geographic distribution of the life history of over 300 species of fish, shellfish, and marine mammals for the entire EEZ and coastal areas of the United States.

- Continued development of the National Estuarine Inventory, a data base of important characteristics of 100 estuaries throughout the United States to identify important environmental quality problems and resource use conflicts.

- Continued support to the U.S. Coast Guard during emergency responses to spills of oil and hazardous materials.

- Continued support to the U.S. Environmental Protection Agency during emergency response actions at "Superfund" hazardous waste dumpsites.

- Assessment of the risks to coastal and estuarine resources from toxic compounds discharged from "Superfund" hazardous waste dump sites in coastal areas (about 40 percent of the Environmental Protection Agency National Priority List are located in coastal areas). Under a major reimbursable agreement with the Minerals Management Service of the Department of the Interior, NOAA also conducts assessments of the effects of oil and gas development of the Alaskan outer continental shelf.

In FY 1990 NOAA will be implementing a natural resource damage assessment staff to carry out its trustee responsibilites. The staff will be comprised of marine scientists, resource economists and environmental lawyers. NOAA expects to initiate damage assessment and litigation at approximately seven hazardous waste sites that affect NOAA's trust resources in the marine environment.

The National Marine Pollution Program Office (NMPPO), under Sections 4 and 8 of the National Ocean Pollution Planning Act (P.L. 95-273), is responsible for preparing and updating the National Marine Pollution Program Plan, supporting the interagency National Ocean Pollution Policy Board, coordinating the implementation of recommendations contained in the most recent plan, and promoting the dissemination of results and findings of Federal marine pollution research and monitoring programs. The NMPPO will facilitate the coordination of Federal activities in high priority program areas such as wetlands studies, nonpoint source pollution, estuarine research, and monitoring the status of the marine environment. They will respond to approximately 1,000 direct inquiries for marine pollution data and information in FY 1990. The Federal Plan for Ocean Pollution Research, Development and Monitoring FY 1988-1992 was published and submitted to the Congress in early 1989. FY 1990 publications include the annual update of the National Marine Pollution Program Summary and Project Catalog. Further development of information synthesis products such as the Report on the State of the Marine Environment, the compendium of Federal laws and regulations related to marine pollution, the automated and indexed bibliography of Federal marine pollution reports, and the Federal handbook of marine pollution data and information sources will continue.

Coastal Ocean Science - NOAA is integrating base programs related to coastal ocean activities to focus its talents and capabilities on reaching the goals set for the three program areas of its Coastal Ocean Program:

Prediction of Coastal Ocean Degradation and Pollution;

Conservation and Management of Living Marine Resources; and

Protection of Life and Property in Coastal Areas

This effort is managed by the Coastal Ocean Program Office within NOAA's Office of the Chief Scientist. NOAA's activities will be undertaken in concert with other Federal, State, and local programs. The Coastal Ocean Program is designed to make effective environmental decisionmaking possible by supplementing current retrospective analyses with timely forecasts and prediction. The ability to predict environmental change will allow us to prevent problems and exploit opportunities through proactive regional approaches, rather than to only monitor and react to runaway problems. Providing decisionmakers with useful predictions of environmental change -- change caused naturally, as well as by society-- is a challenge NOAA accepts.

NOAA's plan for FY 1990 will be directed towards prediction of coastal ocean degradation and pollution in the following areas:

- Expand the existing National Status and Trends (NS&T) program to encompass new sites and investigations to determine biological responses to pollutants.

  -Increase the ability to detect and assess changes in coastal environmental quality by initiating intensive surveys of 2 highly contaminated estuaries and by funding research to determine biological responses to pollutants.

- Focus research on critical estuarine habits to examine their function under natural conditions and to support important marine life. Of special concern will include the effects of nutrient enrichment, diversion of freshwater flows, wetland habitat loss and alteration, and chemical contamination. This information is essential to develop cumulative impact.

  - Increase the capability to effectively describe, prevent, and mitigate detrimental changes in critical living marine resource habitats by completing development of preliminary models of critical estuarine ecosystem.

The habitat studies, together with another element of the FY 1990 program that uses satellite data to map the Nation's tidal wetlands, help to determine rates of change or disappearance of the Nation's wetland.

- Explore the effects of nutrient enrichment associated with human activities on the primary production and water quality of the Nation's coastal oceans and the implications of enhanced production to the global marine carbon cycle. The first study area will be the Mississippi River plume and the adjacent Louisiana Continental shelf.

  - Improve understanding of the influence of the Mississippi River Plume on Gulf of Mexico ecosystems by completing the 1990 field program and preliminary conceptual model of shelf productivity controls.

- Expand our ability to deliver timely information though enhancement of NOAA's new prototype geographic information systems, (ie COMPAS). NOAA will examine correlations among contaminant loadings, pollutant concentrations, distribution of living marine resources and habitats, and land use patterns. Prototype demonstrations of COMPAS with a selected coastal state will allow users to employ state-of-the-art GIS system to support their coastal environmental decisionmaking.

  A CoastWatch project for the Southeast Atlantic region will continue and one for the Chesapeake Bay will be expanded to include remote sensing to increase spatial and temporal observation resolution of spring algal blooms thought to be linked to the Bay's oxygen depletion.

  - Establish linkages between nutrient enrichment and low dissolved oxygen in the Chesapeake Bay, using environmental remote sensing, to produce joint products with EPA supporting the Bay clean-up.

  A prototype Interactive Marine Analysis and Forecast System (IMAFS) will increase NOAA's ability to access and combine rapidly changing observations with model output and archived data. Aspects of the NOAA Ocean Communication Network (NOCN) and IMAFS database management will become operational; software enhancements will allow display of additional satellite imagery; and additional physical, chemical, and biological historical data sets will be added.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Number of ocean observations quality controlled daily	4,000	8,000	24,000
Water level observations, quality controlled, monthly	160,000	170,000	180,000
Station-months, tide data acquired	2,250	2,310	2,370
Station-months, Great Lakes data acquired	648	600	600
Tidal datums computed	250	200	200
Station months, information disseminated	13,700	14,000	14,300
National strategic assessment products (e.g. data atlases) completed	4	4	4
National strategic assessment information bases developed	2	2	2
Benthic surveillance sites sampled	50	50	50
Benthic surveillance sites analyzed	50	50	50
Mussel watch sites sampled	150	150	150
Mussel watch sites analyzed	150	150	150
Oil and hazardous material spill responses	200	200	200
Scientific and technical publications	130	130	130

Changes for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Observation and Prediction	Pos./BA	191	$16,991	188	$16,865	-3	-$126
	FTE/Obl.	197		194		-3	

An increase of $2,300,000 is requested to expand NOAA's basic real-time ocean data collection, monitoring, analysis, prediction and distribution capabilities. These capabilities are fundamental to marine weather forecasts/warnings, climate and global change programs, and coastal ocean programs. The Ocean Services program provides the necessary foundation upon which NOAA's ocean programs and initiatives will build. At the current level, NOAA is unable to support the basic observation, analysis, and critical communication network for both NOAA's operational marine weather forecasting requirements and the global climate change and coastal ocean initiatives.

With this increase the Ocean Service program will be able to expand its focus on observing and predicting the coastal and global ocean environment and will also be able to provide the infrastructure needed to support marine ecosystem studies, habitat monitoring, and global climate change activities. The program will also be able to distribute biological and chemical oceanographic data and products to Federal and State agencies.

Four decreases totalling 3 positions and $2,426,000 are requested in this line item.

A decrease of $875,000 is requested for certain specific ocean services programs. Included in this amount is $375,000 to eliminate funding for NOAA facilities in Ann Arbor, MI; Narragansett, RI; and Beaufort, NC. These funds are no longer required. A reduction of $500,000 is requested to eliminate funding for the Center for Ocean Analysis and Prediction in Monterey, CA. The Center will be supported from other NOAA funds.

A decrease of $1,000,000 is requested for the circulation survey of Tampa Bay. This program was a FY 1990 Congressional add-on (Tampa Bay mapping Project). The survey is now under way and will be completed in FY 1990.

A decrease of three positions and $400,000 is requested in the circulatory survey program. The decrease will result in some reduction in the processing, analysis and archiving of circulatory data but the overall accuracy and reliability of tide and current predictions and circulation data will not be affected. The navigation model for Charleston Harbor supported by this program does not fill a federal need and should be funded by the shipping industry and/or the state which directly benefit from these programs.

A decrease of $151,000 is requested for two marine observation buoys off the coast of California. This program was a FY 1990 Congressional add-on. These buoys provide non-essential data used primarily by recreational boaters, not NOAA.

Location - This proposed reduction will affect personnel located in Rockville, MD.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Ocean Services

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	25
22	Transportation of things	75
23.2	Rental payments to others	125
23.3	Communications, utilities & misc. charges	25
25	Other services	1,350
26	Supplies and materials	400
31	Equipment	300
99	Direct obligations	2,300

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Ocean Services Field Operations

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(20)
22	Transportation of things	(15)
23.3	Communications, utilities & misc. charges	(175)
25	Other services	(265)
31	Equipment	(400)
99	Direct obligations	(875)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Tampa Bay Circulation Survey

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(25)
22	Transportation of things	(8)
23.2	Rental payments to others	(2)
24	Printing and reproduction	(4)
25	Other services	(441)
26	Supplies and materials	(24)
31	Equipment	(496)
99	Direct obligations	(1,000)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Circulatory Survey Program

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	(112)
12.1	Civilian personnel benefits	(10)
21	Travel and transportation of persons	(4)
25	Other services	(274)
99	Direct obligations	(400)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Circulatory Survey Program

Title: VARIOUS

	Grade	Number	Annual Salary	Total Salaries
	GS-12	(1)	41,795	(41,795)
	GS-11	(2)	34,871	(69,742)
Total full-time permanent: Obligations		(3)		(111,537)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(3)
Other than full-time permanent	0
Total	(3)
Authorized Positions:	
Full-time permanent	(3)
Other than full-time permanent	0
Total	(3)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: California Marine Observation Buoys

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(6)
22	Transportation of things	(5)
25	Other services	(140)
99	Direct obligations	(151)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Estuarine and Coastal Assessment	Pos./BA	128	$19,084	127	$17,184	-1	-$1,900
	FTE/Obl.	132		131		-1	

Two decreases totalling one position and $1,900,000 are requested in this line item.

A decrease of one position and $1,000,000 is requested for a Congressionally directed assessment of the Long Island sound. NOAA has sufficient resources to conduct a robust nationwide program of ocean assessments. The order in which these assessments are undertaken should be left to NOAA's scientific determination, not political decision-making.

A decrease of $900,000 is requested for a joint Federal/State research and development project with South Carolina. The work in the Edisto watershed and upper reaches of the Combahee river of South Carolina is now underway and can be turned over to the State.

Location: The proposed reduction will affect personnel located in Rockville, MD.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Long Island Sound Project

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	(64)
12.1	Civilian personnel benefits	(7)
21	Travel and transportation of persons	(20)
22	Transportation of things	(5)
25	Other services	(557)
26	Supplies and materials	(22)
31	Equipment	(325)
99	Direct obligations	(1,000)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities

PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Long Island Sound Project

Title:	Grade	Number	Annual Salary	Total Salaries
Oceanographer	GS-14	(1)	63,766	(63,766)
Total full-time permanent: Obligations		(1)		(63,766)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(1)
Other than full-time permanent	0
Total	(1)
Authorized Positions:	
Full-time permanent	(1)
Other than full-time permanent	0
Total	(1)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: South Carolina Research & Development Project

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(35)
25	Other services	(79)
26	Supplies and materials	(50)
31	Grants, subsidies, and contributions	(736)
99	Direct obligations	(900)

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
Coastal Ocean Science	Pos./BA FTE/Obl.	10	$6,369	11	$17,369	+1	+$11,000

Coastal Ocean Program (+1 Pos., +$11,000,000) - An increase of 1 Position and $11,000,000 is requested to improve NOAA's capability to characterize, understand, predict, and help the Nation cope with serious coastal environmental issues. The increment to this NOAA-wide program is important because:

o The coastal ocean is a magnet for living and recreation, hundreds of thousands of people directly derive their incomes from working on or near it, and it effects the lives of millions who buy goods transported by sea, who visit coastal areas for recreation, and who consume products developed from its resources.

o As a Nation, we have allowed our coastal marine resources and environment to degrade. We now find it necessary to restrict where we swim and the fish and shellfish we eat. We are losing wetlands at a rate that is harmful to marine life. Our neglect has had serious economic consequences.

o The national economy, and especially the local economies of coastal communities, rely heavily on the quality and physical stability of the coastal environment. When beaches erode and are closed because of pollution, when fish and shellfish cannot be sold because of restrictions on their harvest, and when commercial and recreational fishing declines, the costs affect us all.

The FY 1991 request is an extension of NOAA's Coastal Ocean Program which includes ongoing efforts to refocus, coordinate, and integrate its programs to improve the understanding, predictability, and stewardship of coastal ocean resources. This effort is organized around three goals:

1. To predict changes in the quality of the coastal environment and its living marine resources to help prevent further habitat degradation and to recommend mitigative measures.

2. To predict the influence of fishing, habitat degradation, and natural forces on living marine resources to ensure optimal productivity today and for the future.

3. To predict the occurrence and impact of natural physical processes, for both short-term warnings and long-term planning, to prevent or minimize adverse effects of storms and erosion on coastal communities.

Program Content - Over the next 10 years, Federal and State governments will make billion-dollar decisions on actions to enact legislation and develop regulations, develop and implement management plans, install and operate pollution control equipment, conduct waste disposal operations, modify the physical environment, monitor, respond to emergency events, and assess and compensate for damages. The information currently available to make these decisions remains incomplete and often inadequate and inaccessible to appropriate levels of government and the private sector. Therefore, most decision-makers and scientists continue to address specific problems in selected parts of the coastal ocean on a piece-meal basis.

NOAA plays a vital Federal role in developing and implementing solutions to many of the problems confronting the Nation's coastal waters. That role includes legislative mandates as the Nation's steward for living marine resources, for allocating fish harvests, responding to hazardous spills, protecting marine mammals, and formal evaluation of proposed actions that effect living marine resources and the habitats upon which they depend. That role also includes providing information, advice, and the sound scientific basis for environmental decisions made by other local, state, and Federal decision-makers.

The scientifically sound and timely information provided to decision-makers, both within and outside of NOAA, falls into four categories:

1. Data on critical properties, synthesized spatially and temporally, and presented in ways meaningful to environmental decision-makers (e.g., regional maps of wetland loss rates, living marine resource distributions),

2. Predictions of longer-term environmental change that result from proposed human activities relative to change expected due to natural forces alone (e.g., interannual trends in important fish stocks; estuarine responses to nutrient loads),

3. Warnings of impending danger or damage to humans, property, or living marine resources due to the combination of natural and human actions (e.g. storm surge inundation and erosion of coastal wetlands and urban areas; land-fall of spilled oil),

4. Formal advice, evaluation and comments on proposed actions that effect living marine resources and the habitats upon which they depend (e.g., advice to Fishery Management Councils; comments on dredge-and-fill permits proposals).

The FY 1991 Program - To increase the value and effectiveness of its input to coastal ocean decision-making, NOAA will improve both 1) the QUALITY of the information and products being delivered and 2) the methods of information DELIVERY. Program expansions proposed for FY 1991, build upon the FY 1990 Program and NOAA's existing strengths. One of the goals associated with the FY 1991 program is to identify specific problem areas and produce information in a quick and timely manner for decision-makers.

Improving the QUALITY of the NOAA products and information requires focused synthesis and purposeful research and model development in two complementary frameworks: human impacts and natural variability. We focus on understanding and predicting change caused or exacerbated by human actions in four areas of immediate concern: 1) Nutrient over-enrichment, 2) Coastal inundation and erosion, 3) Estuarine alterations, and 4) Coastal ecosystems.

Nutrient over-enrichment (+$1,400,000) - This effort builds upon the FY 1990 program and includes a more detailed national assessment of over-enrichment problems and a program to monitor conditions associated with nutrient over enrichment and potential oxygen depletion. Research will focus on two themes: 1) The program initiated in FY 1990, investigating the impacts of nutrient enhanced coastal ocean productivity in the Mississippi River Plume/Louisiana Shelf region, will be continued and be expanded to initiate a study of the South Atlantic Bight. 2) The importance of atmospheric nutrient load, particularly to East Coast waters, will be evaluated and models of loading up will be developed.

Coastal inundation and erosion (+$200,000) - This is an initial effort to enhance existing data collection and analysis, research, and modeling efforts to provide immediate improvements in predictions related to short-term coastal flooding. It is expected to lead to a longer term effort related to observing and predicting chronic and extreme physical events affecting coastal ocean resources, particularly those very near the shoreline.

Estuarine habitat alteration (+$3,300,000) - This expansion of the FY 1990 effort includes critical assessments of estuarine characteristics, research to enhance our understanding of how major estuarine habitats function and how their functions are altered by human impacts, an estimate of the rate of loss of estuarine wetland habitats, and the impact of habitat alterations and losses on the living marine resources of our coastal oceans.

Coastal ecosystem (+$3,500,000) - The effects of impacts in the categories outlined above can be predicted and eventually controlled only if they are understood within the context of natural variability. Because this variability is driven by combinations of processes (e.g., storms, circulation, ecosystem dynamics) controlled predominantly by natural forces, we include complementary research and model development focussing on understanding the natural structure and function of coastal ecosystems and on predicting change caused naturally. These important research and model development efforts are tightly coupled to impact-focussed efforts outlined above and will provide fundamental understanding of the natural processes and mechanisms that control the productivity of living resources in estuarine and coastal ecosystems.

Common information delivery mechanisms (+$1,100,000) - NOAA will also enhance its DELIVERY mechanisms through improvements in its state-of-the-art geographic information systems and data display and communication systems. These include:

CoastWatch, the remote-sensing-based analysis and prediction program;

COMPAS, micro-computer based information system to provide coastal ocean assessments to local, state, and Federal users;

IMAFS, an interactive marine analysis and forecast system that provides access to, and analysis of, a wide array of real-time and retrospective data, and

NOCN, the backbone NOAA ocean communication network to unite several fragmented systems.

Common observations (+$1,500,000) - Finally, the ongoing and proposed research and model development efforts, as well as the data syntheses, depend on a common suite of observations. Thus, cross-cutting observations systems are also planned for initiation or expansion. These include surface and subsurface data gathered from buoys, ships, and other platforms, as well as from space.

The activities of NOAA's Coastal Ocean Program require efforts across the full spectrum of line offices. Therefore, the program is not line-organization specific. It is managed by NOAA, through a program office at headquarters, making use of a blend of internal programs, competitive grants to the academic community, and private-sector contracts. NOAA's coordinated coastal ocean program will continue to provide the needed national perspective leading to the enhancement of the quality and productivity of our Nation's coastal oceans.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Coastal Ocean Science

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	37
11.9	Total personnel compensation	37
12.1	Civilian personnel benefits	10
21	Travel and transportation of persons	1
22	Transportation of things	1
23.2	Rental payments to others	3
24	Printing and reproduction	5
25	Other services	5,943
26	Supplies and materials	1,000
31	Equipment	1,000
41	Grants, subsidies and contributions	3,000
99	Direct obligations	11,000

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Ocean Service
Subactivity: Observation and Assessment
Program Change: Coastal Ocean Science

Title:	Grade	Number	Annual Salary	Total Salaries
Oceanographer	12	1	37,079	37,079
Total		1		37,079
Less Lapse	0.00%	0		0
Total full-time permanent		1		37,079

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	1
Other than full-time permanent	0
Total	1
Authorized Positions:	
Full-time permanent	1
Other than full-time permanent	0
Total	1

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Ocean and Coastal Management:											
Coastal Management................	Pos./BA	43	39,434	43	42,621	43	41,105	43	36,205	0	(4,900)
	FTE/Obl.	45	39,101	45	45,767	45		45		0	
Ocean Management..................	Pos./BA	37	4,278	37	4,809	37	4,789	37	4,989	0	200
	FTE/Obl.	38	5,851	38	5,035	38		38		0	
Total	Pos./BA	80	43,712	80	47,430	80	45,894	80	41,194	0	(4,700)
	FTE/Obl.	83	44,952	83	50,802	83		83		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Ocean Service:											
Ocean and Coastal Management Ocean Management...............	FTE/obl.	0	40	0	964	0	964	0	314	0	(650)
Reimbursable obligations	FTE/obl.	0	40	0	964	0	964	0	314	0	(650)

Activity: National Ocean Service
Subactivity: Ocean and Coastal Management

Goals and Objectives

Goals: The goal of the Coastal Zone Management Act (CZMA) of 1972 as amended, is to promote rational use and conservation of the Nation's coastal zone. Technical support is provided to coastal states and territories to implement management programs; promote estuarine research and education through the establishment of a national system of estuarine reserves; facilitate the orderly and environmentally sound development and commercialization of deep seabed hard mineral resources and related technology through the implementation of an effective legal framework under the Deep Seabed Hard Mineral Resources Act (P.L. 96-283); and designate and manage valuable marine areas in accordance with Title III of the Marine Protection, Research and Sanctuaries Act as amended (P.L. 100-627).

Objectives: Monitor and evaluate the continued implementation of coastal management programs. Establish a nationwide system of estuarine reserves representative of the various biogeographic regions of the U.S. for research, long-term protection of resources and enhanced public understanding of estuarine areas. Administer the programs required by the Deep Seabed Hard Mineral Resources Act. These programs which are designed to regulate and encourage the mining of manganese nodules from the floor of the deep ocean by United States companies. Additionally, identify, designate, and manage discrete areas of the marine environment of special significance due to their conservation, recreational, ecological, historical, research, educational, or esthetic qualities.

Base Program

Coastal Management - The primary purpose of the CZM program is to address problems of the coastal and marine environment through a coordinated national effort that maintains a balance between resource protection and coastal-related economic activity. Federal resources fund staff to assist coastal states and territories in the development and implementation of their CZM programs and in the establishment and management of estuarine reserves. NOAA will continue to award financial assistance administration grants to states' approved coastal management programs under Section 306; award grants for reserve acquisition, development, operations, education, monitoring and research under Section 315 monitor state compliance with the terms of the financial assistance awards conduct evaluations of state CZM programs under Section 312 and review Federal agency actions for compliance Section 307.

The 1985 Budget Reconciliation Act amended the Estuarine Sanctuary Program under Section 315 of the CZMA to create a National Estuarine Research Reserve System composed of previously designated estuarine sanctuaries and future estuarine reserves that meet statutory criteria. These estuarine reserves provide natural field laboratories to study and gather data concerning the natural and human processes occurring within estuaries. NOAA plans for a national system which is representative of specific biogeographic regions.

Nineteen estuarine reserves have been established in Oregon, Georgia, Hawaii, Ohio, California (two), Washington, Rhode Island, Florida (two), Maryland, Puerto Rico, Maine, North Carolina, Virginia, New York, Alabama, New Hampshire, and Massachusetts.

Ocean Management - Under provisions of the Deep Seabed Hard Mineral Resources Act, NOAA issues licenses and permits for the exploration and commercial recovery of manganese nodules from the deep seabed. In support of this responsibility, NOAA is required to: (1) engage in environmental and ocean related research to assure that development occurs in an environmentally compatible manner and without "environmental risks" to industry; (2) help establish and implement a system whereby the United States and other mining nations recognize each other's seabed mining legal regimes and activities; and (3) facilitate compatibility among such activities.

The effort in FY 1991 will involve continued oversight of licensees' exploration; processing of amendments reflecting changes in corporate membership and in exploration plans; discussions with applicants regarding the environmental aspects of mining system tests; acquiring additional environmental information at license sites to aid in benthic impact predictions; consultations with other seabed mining countries; and consultations with corporations considering applying for licenses as new entrants.

Title III of the Marine Protection Research and Sanctuaries Act of 1972 authorizes the Secretary of Commerce to designate marine sanctuaries, with the approval of the President, in ocean waters as far seaward as the edge of the continental shelf, in other coastal waters to the ebb and flow of the tide, and the Great Lakes or their connecting waters. The National Marine Sanctuary Program was reauthorized in 1988. The reauthorization imposed requirements on NOAA to designate two sanctuaries in FY 1989, designate two sites and complete studies of four additional sites in FY 1990, and complete prospectuses leading to designation of two more sites in FY 1991.

By FY 1991 twelve sanctuaries will have been designated. The locations are: (1) the USS Monitor, off Cape Hatteras, North Carolina; (2) the Key Largo coral reefs south of Miami; (3) the Looe Key coral reef areas of the lower Keys; (4) the Channel Islands of southern California; (5) the Point Reyes/Farallones Islands (6) the Cordell Bank northwest of San Francisco; (7) the Gray's Reef area off Sapelo Island, Georgia; (8) Fagatele Bay, American Samoa; (9) Flower Garden Banks, off the Texas/Louisiana coast; (10) Norfolk Canyon, Virginia; (11) Monterey Bay and (12) the Western Washington Outer Coast. Two new sanctuaries, Northern Puget Sound of Washington State and New England's Stellwagen Banks will be active candidates for designation in FY 1991.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Ocean Mining Licenses monitored	4	4	4
Ocean Mining commercial recover issues being studied	2	2	2
Number of marine sanctuary sites designated	9	7	14
Number of marine sanctuary sites managed and enforced	4	7	9
Number of established estuarine reserves	18	19	21

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Coastal management	Pos./BA	43	$41,105	43	$36,205	0	-$4,900
	FTE/Obl.	45		45		0	

Three decreases totalling $4,900,000 are requested in this line item.

A decrease of $4,400,000 (object class 41.0) is requested for the Section 306 Program Administration and Section 309 Interstate Grants Programs. The Administration's Coastal Zone Management Act reauthorization bill will propose gradually moving away from formula grants to competitively awarded grants. It is anticipated that competitive grants will result in better management of state coastal resources with a lower Federal contribution.

A decrease of $500,000 is requested in the coastal zone and estuarine reserve program management funding. This reflects savings from implementing savings identified by the Commerce Inspector General.

Location - These proposed decreases will affect personnel in Washington, D.C.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Ocean Service
Subactivity: Ocean & Coastal Management
Program Change: Program Management

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(80)
23.2	Rental payments to others	(75)
23.3	Communications, utilities & misc. charges	(90)
25	Other services	(205)
26	Supplies and materials	(50)
99	Direct obligations	(500)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Ocean Management...	Pos./BA	37	$4,789	37	$4,789	0	+$200
	FTE/Obl.	38		38		0	

An increase of $200,000 (object class 25.0) is requested to fund, on a competitive basis, research proposals at the various marine sanctuaries. The current budget for the marine sanctuary program does not include funds for this purpose.

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
Information, Collection, and Analyses:											
Resource Information...............	Pos./BA	820	73,519	799	74,995	802	76,438	811	63,413	9	(13,025)
	FTE/Obl.	864	68,722	843	85,481	846		848		2	
Fishery Industry Information.......	Pos./BA	126	9,517	126	10,647	126	10,898	132	13,898	6	3,000
	FTE/Obl.	133	9,317	133	10,847	133		137		4	
Information Analyses and Dissemination....................	Pos./BA	352	18,155	352	18,529	352	19,277	352	20,977	0	1,700
	FTE/Obl.	370	18,155	370	18,529	370		370		0	
Total	Pos./BA	1,298	101,191	1,277	104,171	1,280	106,613	1,295	98,288	15	(8,325)
	FTE/Obl.	1,367	96,194	1,346	114,857	1,349		1,355		6	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
Information, Collection, and Analyses											
Resource Information...........	FTE/obl.	106	9,216	106	8,289	106	8,289	106	5,348	0	(2,941)
Fishery Industry Information...	FTE/obl.	0	1	0	0	0	0	0	0	0	0
Information Analyses and Dissemination................	FTE/obl.	0	20	0	32	0	32	0	34	0	2
Reimbursable obligations	FTE/obl.	106	9,237	106	8,321	106	8,321	106	5,382	0	(2,939)

Activity: National Marine Fisheries Service
Subactivity: Information collection and analyses

Goals and Objectives

Goals: Provide timely status of stock forecasts based on biological, ecological, economic, and social information necessary to achieve the optimum yield or sustainable populations of U.S. living marine resources, and protect their habitats for the benefit of the Nation.

Objectives: Collect, analyze, and disseminate timely information and recommendations on the status of fish, marine mammal, and endangered species stocks, and on the status of subsistence, commercial, and recreational fisheries, and their social and economic importance. Determine the impacts of the taking of marine mammals and endangered species. Provide a sound scientific basis for predicting change in the habitat of living marine resources from natural and human-induced causes, and the impact of those changes. Improve the quality and timeliness of information services concerning living marine resources, their habitats, and their use.

Base Program

The living marine resources within 200 nautical miles of the coastline of the U.S. contribute billions of dollars each year to the Nation's economy. Under the Magnuson Fishery Conservation and Management Act (MFCMA) and other statutes and international treaties, NOAA is responsible for providing the scientific and technical information needed to conserve living marine resources and their habitats. This information is used by Regional Fishery Management Councils, international and domestic fishery commissions, other Federal agencies, and NOAA as a basis for establishing and implementing a variety of conservation and management measures. Federal agencies also use this information to assess the effects of proposed developments and projects upon marine resource populations and habitats, and by public and private decision-makers to guide the development of the Nation's fishery resources. The information and analyses are the basis for management and development decisions that support the growth and stability of the U.S. fishing industry. Currently, NOAA is conducting research on 146 fish, marine mammal, and endangered species stocks, and their habitats. These assessments require continuous updating because of the dynamic and variable nature of the marine environment and the stocks involved. To complete these assessments, NOAA collects biological, environmental, and statistical data on fish, marine mammal, and endangered species stocks, their habitats, and use. Analytical models are then used to combine these data to assess trends in stock sizes, determine appropriate sustainable yields from resources, and ascertain their economic and social importance.

Resource information -- Activities are designed to collect biological and environmental data about the Nation's renewable living marine resources and their supporting environment. Renewable living marine resources include major fisheries, marine mammals, and endangered species. Research programs are conducted nationwide by NOAA's fisheries research laboratories and provide fundamental information required by Federal, state, and industry decision-makers for management and development purposes.

Scientific surveys, utilizing vessels and aircraft are conducted to collect biological and environmental information on the composition, abundance, and distribution of living marine resources of commercial, recreational, or ecological significance. This includes different species of groundfish, crab, herring, mackerel, shrimp, and salmon, as well as species of marine mammals and sea turtles. This information supports habitat conservation and resource management allocation decisions, including the resolution of conflicts among competing user groups. These surveys provide scientific samples used for determining the characteristics of the resource populations. Stock assessments are produced using a combination of information from surveys and information collected directly from the fishing industry. Industry statistics alone often reflect economic and fishing strategy biases which may mask actual resource abundance trends. A combination of NOAA vessels and chartered vessels is used to gather information concerning living marine resources and their essential habitats. Information from surveys is also obtained through contracts with state agencies, universities, and private organizations. Additionally, cooperative surveys with foreign countries are conducted. Furthermore, data on migratory marine species and environmental conditions in the oceans beyond the continental shelves of the U.S. are supplemented by data collected on ships of opportunity and satellite overflights.

Information is collected on living marine resource species' mortality and growth rates, age structure, distribution and migrations, habitats and physiological requirements, and diseases. These data provide understanding of biological processes necessary for developing biologically sound conservation and management strategies. Food chain and predator-prey relationships are particularly important in understanding the complex interactions of marine species and for moving into comprehensive ecosystem management.

Protected species research focuses on: east coast right whales, bowhead whales; protected species abundance, distribution, migrations and bioprofiles; Pacific coast marine mammal population trends and impacts of human activity; and, fur seal research. Other research focuses on porpoise and monk seals in the Southwest, bottlenose dolphins in the Southeast, and five species of sea turtles in the Southeast and two species in the Southwest. NOAA requires this information to fulfill its Marine Mammal Protection Act and Endangered Species Act responsibilities implemented under the Protected Species Management line item of the Conservation and Management Operations subactivity. In FY 1991, NOAA will continue the five-year Eastern Tropical Pacific (ETP) dolphin monitoring program, mandated under P.L. 98-64. The results of this program will be used to evaluate the ETP dolphin stocks. NOAA will also continue sea turtle work in the Southeast and Southwest.

Accurate prediction of fishery yields is difficult because of the variability in ecological factors that influence abundance of living marine resources. Environmental changes can impact living marine resources significantly during all life stages, which can in turn drastically affect future harvests. These changes also affect the distribution and availability of stocks in traditional migratory routes, feeding and spawning concentrations, and fishing grounds. The effects of natural and human-induced (i.e., fishing pressure, habitat alteration and pollution) changes on marine habitats are studied to determine their relative impacts upon the abundance, distribution, and physiological functions of species of commercial and recreational significance. NOAA also investigates the effects of dams, power plants, effluents, dumping, dredging, and logging on fish, marine mammals, and endangered marine animals. The resulting increased understanding from research in recruitment dynamics, pollutant effects, and ecosystem impacts helps managers to identify and mitigate the causes of mortality. Such action helps increase or maintain marine resource populations.

Anadromous fisheries research is conducted in the Pacific Northwest (in the Columbia River Basin) and in the Northeast. This research addresses salmon production and the quality of smolts released from hatcheries. Salmonid research is conducted to improve the production efficiency of salmon hatcheries in the Pacific Northwest and sea ranches in Alaska. Research is also conducted in support of the U.S. - Canada Pacific Salmon Treaty obligations, and to investigate the interception of U.S. salmon by the Japanese high-seas fishery. Treaty research, management, and enhancement activities are carried out primarily at NOAA's fisheries research laboratories in Auke Bay, AK, and Seattle, WA. Extensive work to implement the Treaty is also done in cooperation with the states of Alaska, Washington, Oregon, and Idaho; Indian tribes; and the Pacific Salmon Commission in Vancouver, British Columbia. NOAA's activities are managed by a field office located in Portland, OR. Base program activities also include Atlantic salmon research, tagging, and support for the North Atlantic Salmon Commission.

Advanced technology is developed and used to improve the timeliness and quality of the information on living marine resources and their habitats. In some fisheries, acoustic devices are used to locate fish and estimate their abundance. Aerial and satellite sensors are used and evaluated for locating plankton concentrations; measuring water temperature, salinity and turbidity; tracking fish, mammals and sea turtles; and for directing research and fishing vessels to places of interest. The application of advanced technology increases the speed with which large ocean expanses and extensive coastal areas can be surveyed, thereby giving a more complete picture of oceanic conditions and how these conditions change.

Fisheries industry information -- Production or output data is necessary to complete the information data base for making and determining the efficacy of management decisions and regulatory measures. Production data consists of biological and economic information collected as a necessary complement to the biological and environmental information collected directly under the Resource Information line item.

Information is collected on the commercial and recreational harvesting and disposition of living marine resources. This information includes: (1) volume and value of catch in domestic and foreign fisheries by species, region, state and type of fishing gear; (2) incidental take or harvest of non-target species; (3) fishing effort and costs associated with catch; (4) volume and value of processed fishery products from domestic harvest and imports; (5) cold storage holdings of fishery products; (6) production of industrial fish products (e.g., fishmeal and oil); (7) the number of operating units and people employed in harvesting and processing fishery products; (8) imports and exports of fishery products; (9) consumption of fishery products; and (10) number of marine recreational fishermen and their catches, effort and expenditures. Fishing effort and location data are collected by logbooks in some fisheries and from interviews of fishermen in others. Samples of the commercial and recreational catch are also collected for biological and statistical analysis. As a result, NOAA obtains a variety of different data from foreign and domestic fishing vessels, surveys of fishermen, records of landings, and onshore fishery facilities. These data are collected in cooperation with the states, foreign governments, and the commercial and recreational fishing industry. They are essential to determine the status of living marine resources and the effectiveness of their management.

Information analysis and dissemination -- Activities are designed to analyze and disseminate the data collected under the Resource Information and Fisheries Industry Information line items using an ecosystems perspective.

Information, analyses, and recommendations on the status of stocks and the effects of management options are provided to NOAA, the eight Regional Fishery Management Councils, and commissions established through international treaties. Biological, ecological, and economic information concerning living marine resources is analyzed to characterize the status of various species, including their reproductive and growth rates, food requirements, interrelationships, habitat requirements, and behavioral characteristics, and to assess the present and future status of those stocks of significant commercial or recreational value, including their abundance and geographic distribution. This information is also used to identify the consequences of natural and human-induced changes in the marine environment on the production and abundance of living marine resources, and to analyze the impacts of fishery management measures on the resources and the industry. Significant emphasis is placed on computer systems for data management to process scientific, administrative, and technical data used in living marine resource management; ecosystem modeling; stock abundance predictions; and other large scale scientific applications. NOAA also needs to share data easily with states and interstate marine fisheries commissions for management of interjurisdictional fisheries, such as menhaden or mackerel, and with other countries, such as Canada or Mexico, for management of transboundary fisheries, including salmon and shrimp.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Number of living marine resources (LMR) stocks assessed[1]	146	146	146
Scientific publications published	440	440	440
Statistical records collected (millions)	14.1	14.1	14.8
Computer references generated and disseminated	18,450	19,000	19,800

[1] Includes 111 fish, 28 marine mammal stocks, and seven sea turtles.

Changes for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.+ or Dec.-	
Resource information	Pos./BA	802	$76,438	811	$63,413	+9	-$13,025
	FTE/Obl.	846		848		+2	

A net decrease of $13,025,000 is proposed for resource information activities.

Increases totalling 31 positions and $5,200,000 are requested to conduct important fisheries research for the conservation and management of living marine resources.

- Conservation engineering.....+8/+$750
- Alaska groundfish............+2/+$700
- Bering Sea pollock...............+21/+$750
- Marine mammal pop. assessments...0/+$3,000

An increase of eight positions and $750,000 is requested to address by-catch issues through conservation engineering. Initially conservation engineering problems in Alaska will be addressed. By-catch of king crab and halibut in the eastern Bering Sea groundfish fisheries is a contentious management issue because it reduces the amount of king crab and halibut available to target fisheries. However, if bycatch limits were imposed, it would prevent the groundfish resources such as pollock and cod from being fully exploited. There are technical and biological interaction issues involved; the technical interaction being the direct loss of halibut and crabs from mortality induced by the groundfish fisheries, and the biological interaction being the predation of many of the groundfish species on crabs. Unfortunately, insufficient information exists on these interactions to quantify and assess accurately their impacts. This increase will provide for assessment of both technical and biological interactions, and for the development of a multispecies model that includes these interactions to assist management in resolving the bycatch issue.

An increase of two positions and $700,000 is requested to conduct Alaskan groundfish surveys to replace surveys previously conducted by the Japanese. Since 1979, the Japanese government has cooperated with the NMFS Northwest and Alaska Regions in fisheries resource surveys in the EEZ off the coast of Alaska. These surveys were conducted in the Gulf of Alaska, the Aleutians, and the eastern Bering Sea. The Japanese have discontinued these cooperative surveys because of the Americanization of our Alaskan groundfish fisheries. Without the Japanese assistance in conducting these resource surveys, the U.S. will have no new or updated information on the status of Gulf of Alaska and Aleutian groundfish stocks (e.g., turbot, sablefish, Pacific Ocean perch, flatfish, Atka mackerel, and pollock) which are now subject to increased domestic fishing. This increase will enable NMFS to contract with U.S. fishing vessels to replace the lost Japanese effort. This survey data is required to update the allowable biological catch (ABC) estimates for these groundfish stocks. The lack of this data could lead to stock depletions and economic losses to the Alaska groundfish industry that currently contributes more than $1,000,000,000 annually to the economy of the Nation.

An increase of 21 positions and $750,000 is requested for Bering Sea Pollock research. Pollock is the most abundant species in the eastern Bering Sea-Aleutian Islands area comprising well over 50 percent of the total groundfish catch. Pollock range completely around the Pacific rim, from Washington State to the Sea of Japan. Heavy foreign fishing in the international zone of the Aleutian Basin is detrimentally affecting the pollock stocks of the U.S. EEZ. This increase will enable NMFS to assess the interrelationships of pollock in the international zone of the Aleutian basin to the pollock of other areas (U.S. EEZ, Soviet EEZ and Western Pacific), and to clarify the role these stocks play in the Bering Sea ecosystem. This scientific information is critical if the U.S. is to conserve the Bering Sea pollock resources, and support future international negotiations.

An increase of $3,000,000 is requested to conduct marine mammal population assessments as directed by the Marine Mammal Protection Act (MMPA) amendments of 1988. Implementation of programs to meet legislative requirements, such as recent amendments to the MMPA, and resolution of problems associated with the incidental taking of protected species and other animals of interest to the U.S., are not adequately funded. Section 114 of the 1988 MMPA amendments directs the Secretary of Commerce to implement a new, interim exemption system for granting incidental take authority to commercial fishermen until October 1, 1993. The two principal components involved are the levels of incidental take and an assessment of the status of the affected populations. The need for research to make population assessments is a critical element, but was not addressed in the MMPA amendments nor spelled out in the subsequent implementation schedule. This request addresses high priority domestic fisheries. Management actions addressing the effects of incidental take will depend on the potential vulnerability of a population, and this requires the knowledge of: (1) whether the population is growing, stable, or declining; (2) information on the population throughout its range; and (3), the known or expected level of take. To determine the effects of incidental take, the most important information needed are the levels and severity of the take, population size and trends, and stock identity. NOAA is required to recommend to Congress by January 1, 1992, a proposed long-term program to manage incidental takings of marine mammals associated with commercial fisheries. In order to meet that time schedule, NOAA must begin conducting and contracting now for the required research studies. For FY 1991, this would include studies on the harbor porpoise, steller sea lion, bottlenose dolphin, harbor seal, California sea lion, and the beluga, humpback and killer whales. Additional species will be addressed in future years.

A decrease of 22 positions and $18,225,000 is requested to reduce or terminate lower priority resource information activities. The remaining base programs along with requested increases will fund high priority management needs anticipated for FY 1991.

- Field structure savings.........	0/-$4,000	- Right whale research..........	0/-$235	- Yukon River Chinook Salmon...	0/-$235
- Stk enhancement/disease rsch...	-22/-$4,287	- Alaska salmon enhancement.....	0/-$3,766	- Antarctic research...........	0/-$1,300
- Protected species research.....	0/-$649	- Subarctic bottomfish rsch.....	0/-$753	- Atlantic salmon research.....	0/-$500
- Chesapeake Bay studies.........	0/-$1,600	- Hawaii stock management.......	0/-$400	- Oyster disease research......	0/-$500

A decrease of $4,000,000 is requested from projected savings to be achieved through the closing and consolidation of NMFS research facilities and related management actions. NOAA is undertaking a review of its current fisheries research laboratory field structure and the research/data collection activities required to support regulatory and other conservation and management requirements under various Federal laws. Based on this review, specific cost saving measures will be proposed to provide the level of savings identified.

A decrease of 22 positions and $4,287,000 is requested for stock enhancement and disease research. Funding will remain to support the sea turtle head start program at Galveston, TX. Non-salmonid research and development activities will be terminated at NOAA's fisheries laboratories in Milford, CT; and the Silver Spring, MD, headquarters ($1,887,000). Industry should fund aquaculture development in areas where there are economic returns to be gained. Federal funding should not support a state facility such as the Newport, OR, laboratory ($350,000) where the state receives direct benefit. NOAA funding should not support catfish rearing ($550,000) and facilities construction ($1,500,000) at Stuttgart, AR, because these activities relate to freshwater programs which are the responsibility of the Department of Interior. NOAA is responsible for marine fisheries, and as confirmed in 1988 by a Commerce Inspector General study, NOAA is not responsible for, nor authorized to operate freshwater facilities such as Stuttgart.

A decrease of $649,000 (object class 25.0) is requested for protected species research. This decrease will result in reduced NOAA research on bowhead whales ($299,000) and the elimination of funding for the Alaskan Eskimo Whaling Commission (AEWC)($350,000). Remaining base programs will continue high priority studies on sea turtles and limited-high priority bowhead whale research.

A decrease of $1,600,000 (object class 25.0) is requested for the Chesapeake Bay studies directed by a Congressional add-on in FY 1990. This will reduce NOAA's Chesapeake Bay research activities which emphasized the relationship between natural and human-created factors and the response of fish populations. This effort was conducted in cooperation with other Federal and non-Federal agencies. Efforts to clean up the Chesapeake Bay will continue with the Environmental Protection Agency, the State of Maryland, and the Commonwealths of Virginia and Pennsylvania.

A decrease of $235,000 (object class 25.0) is requested for the right whale research directed by a Congressional add-on in FY 1990. This research has been funded since FY 1986 to conduct cooperative studies with the University of Rhode Island on the Atlantic coast right whales. Funding in FY 1991 is not required.

A decrease of $3,766,000 (object class 25.0) is requested for Alaska salmon enhancement activities directed by a Congressional add-on in FY 1990. This funding passes through NOAA to the Alaska Department of Fish and Game. There is no evidence that these activities are necessary. Furthermore such activities should be funded by the State which is the direct beneficiary of the hatcheries.

A decrease of $753,000 (object class 25.0) is requested for the sub-Arctic bottomfish research directed by a Congressional add-on in FY 1990. This cooperative fisheries/oceanography research effort takes an ecosystems approach in defining and quantifying environmental relationships with productivity and recruitment of commercial fish and shellfish stocks in Auke Bay, AK. The Association of Primary Production and Recruitment (APPRISE) is a cooperative effort involving the University of Alaska, the Oceanic Institute of Hawaii, and NOAA's Auke Bay, AK, fisheries research laboratory. Research in this area is being conducted through NOAA's Fisheries Oceanography Cooperative Investigation program. High priority work under this research effort will continue using NOAA base funding.

A decrease of $400,000 (object class 25.0) is requested for the Hawaii stock management plan used to enhance commercial and recreational fish stocks in the Hawaiian Islands. This activity has been supported since FY 1987 and is expected to be completed during FY 1990.

A decrease of $235,000 (object class 25.0) is requested for the Yukon River chinook study. This study, which has been funded since FY 1987, provides information used to implement positions of the U.S.-Canada Pacific Salmon Treaty. Additional information is not required in FY 1991 for Treaty implementation and harvest allocation.

A decrease of $1,300,000 (object class 25.0) is requested for the Antarctic marine living resource program (AMLR). Funding for this field research program was directed by Congress under P.L. 98-623 to establish coordinated programs with other Federal, foreign, and international agencies. NMFS will continue high priority program elements within the base program.

A decrease of $500,000 (object class 25.0) is requested for the Atlantic salmon research activities directed by a Congressional add-on in FY 1990. The NMFS fisheries research laboratory at Woods Hole, MA, contracts with states and other Federal agencies to conduct Atlantic salmon studies to determine the interception rate of U.S. origin Atlantic salmon by foreign fisheries in Canadian and Greenland waters, to develop stock identification methods, to establish seasonal restrictions to protect U.S. salmon from foreign high seas fisheries, and to determine river-of-origin of Atlantic salmon based on scale pattern analysis. These activities should be funded by states and/or commercial fishermen who are the direct beneficiaries.

A decrease of $500,000 (object class 25.0) is requested for oyster disease research activities directed by a Congressional add-on in FY 1990. NOAA has worked with the State of Maryland, the Virginia Institute of Marine Science, and others to conduct research emphasizing the development of the monoclonal antibody approach for disease diagnosis. The highest priority aspects of this research, originally projected to be a one-year project, will be substantially completed.

Variable Ship Costs ($2,390,100) - Variable ship costs associated with the Resource Information line item support 1,576 days-at-sea and are requested under the Marine Services subactivity.

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Fisheries industry information	Pos./BA	126	$10,898	132	$13,898	+6	+$3,000
	FTE/Obl.	133		137		+4	

An increase of $1,000,000 (object class 25.0) is requested for PACFIN activities. PACFIN is a coordinated effort involving California, Oregon, Washington, Alaska, the Pacific, North Pacific and Western Pacific Regional Fishery Management Councils, the Pacific Marine Fisheries Commission, and NOAA. Although Congress appropriated an initial $1,000,000 in FY 1990 to support existing PACFIN efforts, it was not sufficient to address the increased level of stock assessment and catch/effort data necessary to manage the rapidly growing groundfish fisheries off the west coast and Alaska. The Councils and NOAA are under intense pressure by several commercial fisheries to develop fishery management plans (FMPs) for abundant stocks such as pollock. Catch-effort data and in-season monitoring of harvest rates and their effects on catch-effort/stock levels are required to support existing and new FMPs, and to address the increased user conflicts and threats to the fishery stocks managed under the MFCMA. This increase will enable NMFS to manage and develop Pacific Ocean fishery resources more effectively and efficiently by improving stock assessments, improving state and Pacific Marine Fisheries Commission data systems and standards, and implementing a fisheries data system in the western Pacific.

An increase of six positions and $2,000,000 is requested to provide for Alaska groundfish monitoring. The Americanization of the groundfish fishery in the EEZ off the coast of Alaska has resulted in the rapid growth of both the harvesting and processing sectors of the domestic groundfish fisheries. The user conflicts between various segments of the industry, and the large sums of capital invested have resulted in requests for improved stock assessments. Detailed fisheries data are required to improve alternative management strategies, and to assess the economic performance of fisheries. To meet this information demand, new efforts are required to monitor fisheries. This increase will address the following: (1) a catch reporting system that links vessel based computers directly to a central data base located at the Alaska Regional Office in Juneau, AK; (2) a system of observers and port samplers that can retrieve catch data and biological sampling from various segments of the industry; (3) increased assistance to the State of Alaska for improved data collection on groundfish, and the implementation of the data reporting requirements for the king and tanner crab fishery management plan; (4) an integrated industry data base management and reporting system; and (5), field/observer positions for data collection.

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Information analyses and dissemination............................	Pos./BA	352	$19,277	352	$20,977	0	+$1,700
	FTE/Obl.	370		370		0	

An increase of $1,700,000 is requested to lease computer hardware and software to support NOAA's fisheries research activities at Seattle (Sand Point), WA; Miami, FL; and Silver Spring, MD.

The Burrough's 7800 and 6800 computer systems at Seattle (Sand Point), WA, and Miami, FL, are now particularly vulnerable as the manufacturer has refused to continue the maintenance agreement for computer hardware after November 1990. The operating systems for those machines will no longer be supported after June 1990. NMFS needs to meet the current and projected top-end computing needs to support the full spectrum of domestic and international management of living marine resources (fish, marine mammals, endangered species) including improved stock forecasts. Major benefits of improved stock forecasts accrue to commercial and recreational fishermen and processors in important fishing states such as Massachusetts, South Caroline, Florida, Louisiana, Mississippi, Texas, California, Washington, Oregon, Alaska, and Hawaii. These improved forecasts will enhance the ability of the Councils, international organizations (e.g., IWC) and others to make well-informed management decisions concerning living marine resources. In addition, updated computer facilities will allow for improved agency analyses and decisions; reduced response time on policy issues; new types of research and analyses; improved collaboration on such issues as US/Canada treaties; and, improved compliance with various laws.

Additional Resource Information
(dollar amounts in thousands)

Resources for sub-line item detail are reflected below:

	1989 Actual		1990 Currently Available		1991 Estimate	
Resource information	Pos.	Amount	Pos.	Amount	Pos.	Amount
Resource surveys....................................	269	23,336	248	23,702	253	21,716
Fisheries biology..................................	167	8,999	167	8,630	196	8,671
Protected species biology..........................	55	7,577	55	8,096	55	9,703
Fishery ecology (habitat research).................	214	14,057	214	14,267	214	12,489
Anadromous fisheries research......................	87	14,706	87	15,025	87	10,346
Stock enhancement and disease research.............	28	4,844	28	5,275	6	488
Total	820	73,519	799	74,995	811	63,413

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: Information Collection and Analysis
Program Change: Resource Information Programs

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	701
11.9	Total personnel compensation	701
12.1	Civilian personnel Benefits	181
21	Travel and transportation of persons	169
22	Transportation of things	66
23.3	Communications, utilities and miscellaneous charges	11
24	Printing and reproduction	55
25	Other services	6,479
26	Supplies and materials	180
31	Equipment	358
99	Direct obligations	8,200

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: Information Collection and Analysis
Program Change: Resource Information Programs

Title:		Grade	Number	Annual Salary	Total Salaries
Fishery Biologist		12	1	37,079	37,079
Fishery Analyst		12	1	37,079	37,079
Computer Analyst		12	1	37,079	37,079
Operations Research Analyst		12	1	37,079	37,079
Fishery Ecologist		11	2	30,937	61,874
Fishery Biologist		11	4	30,937	123,749
Fishery Biologist		9	10	25,570	255,697
Computer Programmer		9	2	25,570	51,139
Statistician		9	1	25,570	25,570
Fishery Biologist		7	1	20,902	20,902
Biological Technician		7	7	20,902	146,313
Biological Technician		5	6	16,876	101,254
Total			37		934,813
Less lapse	25.00%		9		233,703
Total full-time permanent			28		701,110

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	28
Other than full-time permanent	0
Total	28
Authorized Positions:	
Full-time permanent	37
Other than full-time permanent	0
Total	37

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: Information Collection and Analysis
Program Change: Resource Information Programs

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(623)
11.9	Total personnel compensation	(623)
12.1	Civilian personnel Benefits	(156)
21	Travel and transportation of persons	(18)
22	Transportation of things	(20)
23.3	Communications, utilities and miscellaneous charges	(3)
24	Printing and reproduction	(3)
25	Other services	(17,373)
26	Supplies and materials	(4)
31	Equipment	(21)
32	Lands and structures	(4)
99	Direct obligations	(18,225)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: Information Collection and Analyses
Program Change: Resource Information - Stock Enhancement and Disease Research

Title:		Grade	Number	Annual Salary	Total Salaries
VARIOUS		14	(1)	52,020	(52,020)
		13	(3)	44,021	(132,063)
		11	(6)	30,887	(185,322)
		9	(5)	25,529	(127,645)
		7	(3)	20,868	(62,604)
		5	(2)	16,849	(33,698)
		4	(2)	15,059	(30,118)
Total			(22)		(623,470)
Less lapse	0.00%		0		0
Total full-time permanent			(22)		(623,470)

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	(22)
Other than full-time permanent	0
Total	(22)
Authorized Positions:	
Full-time permanent	(22)
Other than full-time permanent	0
Total	(22)

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: Information Collection and Analysis
Program Change: Information Collection & Analysis - ADP Upgrade

Object Class	1991 Increase/ (Decrease)
23.2 Rental payments to others	1,500
23.3 Communications, utilities and miscellaneous charges	200
99 Direct obligations	1,700

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
Conservation and Management Operations:											
Fisheries Management Programs.....	Pos./BA	145	28,232	145	28,904	145	29,111	145	19,340	0	(9,771)
	FTE/Obl.	153	28,199	153	29,104	153		153		0	
Protected Species Management......	Pos./BA	63	7,590	82	17,026	82	14,448	82	14,712	0	264
	FTE/Obl.	66	6,961	85	17,890	85		85		0	
Habitat Conservation..............	Pos./BA	83	5,274	83	5,369	83	5,544	83	5,544	0	0
	FTE/Obl.	88	5,434	88	5,369	88		88		0	
Enforcement and Surveillance......	Pos./BA	138	7,448	164	9,091	164	9,380	164	9,380	0	0
	FTE/Obl.	146	7,448	172	9,091	172		172		0	
Total	Pos./BA	429	48,544	474	60,390	474	58,483	474	48,976	0	(9,507)
	FTE/Obl.	453	48,042	498	61,454	498		498		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
Conservation and Management Operations											
Fisheries Management Program...	FTE/obl.	20	1,480	20	1,840	20	1,840	20	1,858	0	18
Protected Species Management...	FTE/obl.	0	38	0	406	0	406	0	508	0	102
Habitat Conservation...........	FTE/obl.	0	34	0	47	0	47	0	47	0	0
Enforcement and Surveillance...	FTE/obl.	0	307	0	406	0	406	0	456	0	50
Reimbursable obligations	FTE/obl.	20	1,859	20	2,699	20	2,699	20	2,869	0	170

Justification of Program and Performance

Activity: National Marine Fisheries Service
Subactivity: Conservation and management operations

Goals and Objectives

Goals: Implement and monitor conservation and management measures to achieve a continued optimum utilization of living marine resources and their habitats, rebuild depleted stocks, and provide an enhanced opportunity for stability of the recreational and commercial fishing sectors.

Objectives: Identify depleted and overexploited fish stocks. Assist in the development of domestic and international management measures that would provide for stock rebuilding. Consider effort controls such as limited access, individual transferable quotas, and enterprise allocations. Secure the best terms possible for access of the U.S. commercial and recreational fishing industries to foreign and international fishery resources. Conserve populations of marine mammals and endangered species that are affected by domestic and international human activities. Conserve the habitats of living marine resources and associated ecosystems to sustain those resources at optimum levels. Ensure compliance with management regimes for fishery resources, marine mammals, and threatened or endangered species.

Base Program

The Magnuson Fishery Conservation and Management Act (MFCMA), establishes exclusive U.S. jurisdiction over virtually all living marine resources in the 2.2 million square miles of ocean area, known as the Exclusive Economic Zone (EEZ), within 200 nautical miles of the coastline of the U.S. and its territories. The MFCMA also authorizes habitat conservation, research, and stewardship throughout species' ranges. This MFCMA was passed to assure that fishing within the EEZ is conducted under sound scientific and economic conditions. Under the MFCMA, the U.S. commercial and recreational fishermen have preference over foreign fishermen to harvest resources within the EEZ. Through management decisions, regulations, enforcement, and conservation activities, NOAA and the eight Regional Fishery Management Councils established by the MFCMA, work with the states, industry, other Federal agencies, and other organizations in an attempt to provide stability and growth to the U.S. living marine resources and the domestic fishing industry. These efforts are based upon a continuous flow of data, information, and analyses provided by NOAA, universities, and the international scientific community. In 1988, the foreign catch within the U.S. EEZ was reduced by over 99%, compared to 1976. Estimates regarding the 1991 domestic harvest show totals will meet or exceed 1988 levels.

In addition, other fishery resources must be monitored such as tuna, swordfish, billfish, sharks, groundfish, anchovies, scallops, and salmon that range beyond the U.S. EEZ and are harvested by the fishing fleets of the U.S. and many other countries. NOAA also participates in international management efforts to maximize U.S. access to these resources.

Fisheries management programs -- Commercial and recreational fisheries are managed to prevent overfishing and stock depletions, to protect their habitats from further degradation and pollution, to increase domestic harvests, and to maintain optimum yields. This management would, for example, allow the commercial fishermen and processors to operate in a more stable and profitable environment, and the recreational fisheries to support high quality angling experiences.

The U.S. fisheries which extend beyond the U.S. EEZ are managed by international organizations under several treaties and international agreements. Currently, nine international fishery management agreements are implemented involving 50 countries and species such as halibut, tuna, and salmon. NOAA monitors significant fishery activities in foreign countries to determine their effects on U.S. interests. NOAA acquires information on foreign fishing practices and the fishery policies and programs of foreign governments through the translation and review of technical literature, discussions with foreign and international fishery officials, and communications with U.S. diplomatic officers. Additionally, foreign fishing within the U.S. EEZ is assessed. This information is used by NOAA and the Department of State in negotiating and implementing international fishery agreements. It is also used for determining which foreign countries will be allowed to harvest the fishery resources not utilized by U.S. fishermen within the U.S. EEZ. NOAA participates in numerous negotiations with representatives from foreign countries and international fishery commissions. These negotiations and fishery allocation decisions occur throughout each fishing year and require a continuous assessment of information on the fishing industries of foreign countries.

The RFMCs are responsible for developing fishery management plans (FMP) for foreign and domestic fisheries in the U.S. EEZ. The Councils may also become involved in ecological issues in estuarine or freshwater areas affecting managed species under their review. NOAA provides the Councils with technical and administrative assistance, and financial support to develop, monitor, and amend FMPs. Each existing plan may have one or more amendments per year. Councils annually review applications for fishing permits from foreign countries, conduct over 100 public hearings and meetings, and determine the yields and total allowable level of foreign fishing (TALFF) for each fishery under management within their jurisdiction. NOAA reviews the management plans developed by the Councils to ensure compliance with the MFCMA and implements these plans through promulgation and enforcement of regulations. NOAA issues permits for foreign fishing conducted under such plans. A shift in emphasis from plan development to implementation and monitoring will continue in FY 1991. This shift also includes broadening species composition or geographical area of some management plans. For example, the Western Pacific seamount groundfish preliminary fishery management plan has been replaced by a management plan for the Western Pacific bottomfish and seamount groundfish fishery. Current estimates are that three FMPs will be implemented in FY 1990 and three FMPs implemented in FY 1991. Permit fees and poundage fees collected by NOAA from foreign countries with fishing fleets operating within the fishery jurisdiction of the U.S. are currently deposited in the General Fund of the Treasury as proprietary receipts to the Department of Commerce.

The coastal states are responsible for conserving and managing the commercial and recreational fisheries within their boundaries (generally within 3 nautical miles of the U.S. coastline). Approximately 35 percent of the commercial harvest and more than 75 percent of the recreational fisheries catch comes from state waters. State cooperation and coordination of interjurisdictional state effort supports effective management. NOAA provides technical and financial assistance to the coastal states and interstate marine fisheries commissions to conserve and manage fisheries and to participate in the activities of the Councils.

NOAA funds the operation and maintenance of the Columbia River hatcheries authorized under the Mitchell Act. The hatcheries mitigate for loss of salmon and steelhead habitat caused by Federal dams. Funding for this program is not requested for FY 1991 since legislation will be proposed to transfer the funding to a non-Federal source. NOAA also contributes to the salmon management plan development, reviews fish ladder and screen designs, assists in water budget and fish transportation activities, and implements provisions of the Northwest Power Planning Act and the U.S.-Canada Pacific Salmon Treaty.

Protected species management -- These activities use scientific information provided from research on the biology of protected species as the basis for protected species management and conservation. NOAA is required under three principal Acts relating to protected species to consider and minimize the effects of human activities in the marine environment that interact with these species: the Marine Mammal Protection Act (MMPA), the Endangered Species Act, and the Fur Seal Act.

The MMPA of 1972 established a national policy for protecting and conserving marine mammals by imposing a moratorium, with certain exceptions, on the taking or importing of marine mammals and marine mammal products. NOAA shares the responsibility for implementing the MMPA with the Department of the Interior and is responsible for more than 100 species of whales, porpoises, seals, and sea lions. NOAA administers the moratorium by developing and implementing procedures to reduce the mortality of marine mammals during domestic and foreign commercial fishing operations, Outer Continental Shelf development, and other activities affecting these animals. In 1988, the MMPA was amended to require observer coverage on domestic fishing vessels in fisheries where a high level of interaction between the fishing operations and marine mammals was expected. NMFS began implementation of this program in 1989 and will achieve observer coverage in nine Category I fisheries in FY 1990. NOAA processes applications for the taking or importing of marine mammals and conducts public hearings on these applications. Since 1972, 955 scientific research and public display applications have been received, and 657 permits have been issued. The take authority for 155 permits is currently valid, and 392 permits were monitored during FY 1988 (latest data). Approximately 60 applications for permits are processed each year. NOAA is responsible for implementing several international agreements concerning marine mammals including the International Convention for the Regulation of Whaling and participates in numerous international negotiations concerning these and other marine mammal agreements.

NOAA is also responsible for the management, conservation, and recovery of 21 marine species listed as threatened or endangered under the Endangered Species Act (ESA) of 1973. Through interagency agreements, NOAA cooperates with the Department of the Interior in listing, protecting, and controlling the importation of threatened or endangered marine species into this country. NOAA also promulgates and administers regulations; reviews state laws, regulations, and management programs for compliance with Federal regulations; monitors certificates which allow limited interstate commerce in certain whale oil and scrimshaw products; and reviews applications and issues permits for scientific research and propagation activities. NOAA provides public education and information services on protected species; participates in regional networks for stranded mammals with universities, state agencies, and private organizations; develops species recovery programs; consults with other Federal agencies; and develops biological opinions under Section 7 of the ESA to assist Federal agencies in ensuring that their activities are not likely to jeopardize the continued existence of listed species or their critical habitats.

NOAA manages the fur seal herd, located in the Pribilof Islands, as authorized by the Fur Seal Act of 1966; as amended (P.L. 98-129), and conducts supporting research under the protected species biology program. NOAA also contributes to the retirement fund established by the Fur Seal Act for Aleuts. A $20 million trust fund was established with the State of Alaska in 1983 for the benefit of the residents of the Pribilof Islands. The trust fund provides capital to allow for transition from a Federally supported economy to a self-supporting fishing and tourism-based economy.

Habitat conservation -- Habitat management activities are vital for the long-term survival and health of living marine resources including important target species of U.S. commercial and recreational marine fisheries. These activities use scientific information provided from ecological research as the basis for habitat conservation and support of the Administration's policy of no net loss of wetlands.

NOAA provides Federal agencies with information and recommendations concerning the ecological impacts of proposed actions which would affect the habitats of anadromous (e.g. salmon), estuarine, and marine fish populations. Such advice and recommendations by NOAA are authorized under the Fish and Wildlife Coordination Act (FWCA), the National Environmental Policy Act, the Clean Water Act, and other legislation. The MFCMA also gives authority and opportunity for NOAA and the eight Regional Fishery Management Councils to attain habitat conservation objectives. Typical subjects for analysis are construction projects by the Bureau of Reclamation and the Army Corps of Engineers; projects requiring Corps of Engineers' permits for dredging and filling; projects requiring Federal Energy Regulatory Commission licenses for hydropower plant construction; and projects requiring contaminant discharge permits from the Environmental Protection Agency.

To assess potential adverse ecological impacts, NOAA annually evaluates numerous leases for oil and gas exploration and production on the Outer Continental Shelf and thousands of Federal projects and permit applications filed with the Corps of Engineers. In 1988, such permit applications covered over 39,000 acres of coastal habitats with fisheries values estimated in excess of $12 million in terms of commercial fishery harvests (latest data). NOAA also reviews and provides technical assistance on fisheries matters important to state coastal zone management plans, special area management plans, and proposed marine and estuarine sanctuaries. These consultations help to minimize or eliminate adverse effects on marine fish populations by recommending appropriate alternatives and mitigation which would be compatible with a healthy marine environment.

Evaluations and reviews are coordinated to minimize delays and confusion to applicants. During FY 1991, NOAA will continue to implement its national habitat conservation policy. The policy emphasizes identification and action on priority resource issues and supports the involvement of the Councils, states, industry, private interests, and other Federal agencies interested in habitat conservation matters.

Enforcement and surveillance -- Activities support the enforcement of existing laws and regulations and comprise one of the key ingredients for credible management efforts to support the growth and stability of the domestic fishing industry. NOAA enforcement agents investigate violations of Federal laws and regulations under the MFCMA, the MMPA, the ESA, the Lacey Act, and other Federal statutes and international agreements relating to living marine resources.

Enforcement agents investigate violations of Federal laws and regulations to ensure that both foreign and domestic fishing vessels are operating in accordance with fishery management requirements. NOAA also protects living marine resources by investigating illegal importation or interstate transportation of parts or products of protected species. This protection includes conducting the full range of investigative activities such as the purchase of evidence and information, seizure of contraband, and management of operating funds for covert operations and undercover activities conducted by NOAA's enforcement agents. Enforcement and surveillance activities involving fishing vessels are planned and conducted in cooperation with the U.S. Coast Guard, which provides aerial and surface patrol craft. NOAA also charters aircraft to supplement the Coast Guard's effort and enters into cooperative agreements with state enforcement agencies. Shoreside activities also require the purchase or lease of government unmarked sedan vehicles to carry out undercover operations and investigations. These actions reduce the illegal harvesting and taking of stocks and fishing gear conflicts and ensure that conservation and management measures are met. Surveillance activities also provide information concerning catches and fleet movements used for managing domestic and foreign fisheries and in international negotiations.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Fishery Management Plans implemented (cumulative)	36	39	42
FMP amendments	12	17	18
Regional Fishery Management Council formal meetings	50	45	50
Public hearings conducted (and public comment periods)	120	120	120
Protected species permits monitored	410	440	470
Marine mammal exemptions	10,300	15,000	20,000
Habitat recommendations provided on Federal permits and projects	7,200	7,200	7,200
Violations investigated	2,775	2,800	2,900

Increases/Decreases for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Fisheries management programs	Pos./BA	145	$29,111	145	$19,340	0	-$9,771
	FTE/Obl.	153		153		0	

Two decreases totalling $9,771,000 are requested in the fisheries management program line item. Management regimes will be continued in FY 1991 for those stocks under approved management programs.

A decrease of $9,300,000 (object class 25.0) is requested for the operation and maintenance of the Columbia River program hatcheries. These hatcheries are required to mitigate the harmful effects of dams built along the Columbia River to serve the local population. Legislation will be proposed to transfer funding responsibility for the hatcheries operation and maintenance to a non-Federal source.

A decrease of $471,000 (object class 25.0) is requested for the management of Georges Bank fisheries. High priority cooperative work with the Canadian government on Georges Bank fisheries will continue with other New England fisheries programs and through existing U.S.-Canadian agreements.

		1991 Base		1991 Estimate		Inc.(+) or Dec.-	
Protected species management	Pos./BA	79	$14,448	79	$14,712	0	+$264
	FTE/Obl.	85		85		0	

A net increase of $264,000 is proposed for protected species management programs.

An increase of $300,000 (object class 25.0) is requested to augment the observer monitoring effort of the North Pacific Driftnet Program. In FY 1990, Congress appropriated $3,000,000 to establish a Driftnet Program to address the illegal catch of U.S. salmon and steelhead trout by foreign fishermen in the North Pacific Ocean. This program included observer monitoring, research and assessments, studies on impacts of by-catch, and mitigation measures. Approximately $1,300,000 of the initial $3,000,000, was identified for the observer program to fund 40 scientific observers and processing support. The budget for the observer program was based upon the normal placement of observers on the foreign fishing or support vessels through foreign ports. Based on experience to date, at least 50 observers will be required to provide a comprehensive sampling of the entire driftnet fishery.

A decrease of $36,000 (object class 25.0) is requested for the State of Oregon's Department of Fish and Wildlife program to collect data on harbor seals and sea lions. Funding for this work was not requested by NOAA but directed by a Congressional add-on in FY 1990. NOAA will continue to conduct ongoing assessments of marine mammals with base funds in FY 1991.

Additional Resource Information

(dollar amounts in thousands)

Resources for sub-line item detail are reflected below:

	1989 Actual		1990 Currently Available		1991 Estimate	
	Pos.	Amount	Pos	Amount	Pos.	Amount
Fisheries management programs						
Regional Fishery Management Councils....................................	0	$7,233	0	$7,233	0	$7,233
Columbia River hatchery operations and maintenance.......................	0	$9,300	0	$9,300	0	0
Georges Bank..	0	$ 471	0	$ 471	0	0
Domestic Fisheries management...	81	$6,128	81	$6,468	81	$6,568
International Fisheries management......................................	39	$3,000	39	$3,180	39	$3,237
Interjurisdictional Fisheries management................................	25	$2,100	25	$2,252	25	$2,302
Total	145	$28,232	145	$28,904	145	$19,340

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
State and Industry Assistance Programs:											
Grants to States..................	Pos./BA	0	6,655	0	6,655	0	6,655	0	0	0	(6,655)
	FTE/Obl.	0	6,313	0	8,315	0		0		0	
Fisheries Development Program....	Pos./BA	207	11,707	196	11,814	207	12,254	121	5,894	(86)	(6,360)
	FTE/Obl.	216	11,241	205	12,710	216		130		(86)	
Total	Pos./BA	207	18,362	196	18,469	207	18,909	121	5,894	(86)	(13,015)
	FTE/Obl.	216	17,554	205	21,025	216		130		(86)	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
State/Industry Assistance Programs Fisheries Development Program..	FTE/obl.	0	197	0	97	0	97	0	76	0	(21)
Reimbursable obligations	FTE/obl.	0	197	0	97	0	97	0	76	0	(21)

Justification of Program and Performance

Activity: National Marine Fisheries Service
Subactivity: State and industry assistance programs

Goals and Objectives

Goals: Increase the benefits to the United States from the Nation's commercial and recreational fisheries.

Objectives: Increase the sale of fresh and processed fishery products in the United States and abroad by providing technical assistance on product quality, safety, and public health impediments to the growth and stability of the U.S. fishing industry. Assure consumers of the safety, quality, and wholesomeness of seafood products. Reduce the U.S. fisheries balance of trade deficit by increasing exports of products from underutilized and traditional fisheries. Provide complete and prompt financial services to the U.S. fishing industry to ensure access to capital at reasonable rates and maturities.

Base Program

There is a great potential for future development and expansion of the commercial and recreational fisheries of the U.S. Marine fishery resources within the exclusive fishery jurisdiction of the U.S. will support annual harvests of approximately eight million metric tons, or an increase of approximately 250 percent above present harvests. The greatest expansion can occur in fisheries that are often bypassed by American fishermen, including Alaska bottomfish, squid, Pacific hake, and Gulf of Mexico coastal pelagics. The Magnuson Fishery Conservation and Management Act (MFCMA), the American Fisheries Promotion Act of 1980, and the Fish and Seafood Promotion Act of 1986 encourage the full use of available resources by the U.S. fishing industry. In the joint Government/industry efforts to use the renewable resources for the benefit of the Nation, it is industry's role to catch and market the fish. Government effort focuses on the safety of seafood, government to government trade relations, and operating an equitable management decision process that considers impacts on development as a criterion.

Grants to states -- This line item contains grants to states that were authorized under the Commercial Fisheries Research and Development Act of 1964 (P.L.88-309) as well as grants authorized by the Anadromous Fish Conservation Act of 1965 (P.L. 89-304). Effective October 1, 1987, P.L. 88-309 was replaced by the Interjurisdictional Fisheries Act of 1986 (P.L. 99-659, Title III).

Fisheries development program -- This line item supports NOAA's fisheries trade program addressing trade issues on an interagency basis working with the International Trade Administration, Office of the U.S. Trade Representative, and the seafood industry. This effort includes activities to resolve tariff and non-tariff barriers to trade, manage the Saltonstall-Kennedy Grant program, and carry out fisheries product safety and quality research.

Given the growing problems in the area of trade (deficit and relations) and the increasing call for trade sanctions, NOAA insures that policy makers have the best information possible and that the impacts of decisions and actions taken can be understood. This program supports objectives with respect to the fishing industry's competitiveness. NOAA is responsible for formulating trade strategy and positions on fishery products for bilateral and multilateral negotiations, and participates as the Department's fishing industry sector staff. Activities include providing technical expertise to support participation in Uruguay Round negotiations and U.S./Canada Free Trade Agreement implementation, and active bilateral efforts to reduce trade barriers (e.g., Japan and Korea). These efforts with the Japanese yielded increases in U.S. seafood exports of about $13 million in 1988. NOAA also provides support for actions under U.S. trade law, such as the ongoing U.S./Canada herring and salmon disputes and new activity under the 1988 Omnibus Trade and Competitiveness Act, as well as support for the Department's U.S. Foreign and Commercial Service activities in foreign countries.

The FY 1991 Fisheries development program will maintain a product safety and quality research capability in Charleston, SC, to support the voluntary inspection program, develop product standards, and conduct priority product safety research.

Financial services program administration -- Section 607 of the Merchant Marine Act of 1936 (46 USC 1177), authorizes the Fishing Vessel Capital Construction Fund program, and Section 4 of the Fish and Wildlife Act of 1956 (16 USC 742(c) (expired) authorized the Fisheries Loan Fund Program. The Capital Construction Fund allows fishermen to construct or reconstruct fishing vessels with before-tax, rather than after-tax, dollars. Fishing vessel owners, under terms of contracts with NOAA, can deposit their fishing vessel income in local financial institutions for purposes of buying, building, or reconstructing vessels. Federal income taxes are deferred, along with earned interest on deposit. The nominal value not real value, of deferred taxes are recaptured by reductions in the depreciable basis, for tax purposes, of vessels benefitting from this tax-deferral program. The fisherman receives a direct subsidy equal to the difference between the real value of dollars used for construction and the reduced dollar value recaptured later in taxes. NOAA also administers the portfolio from the Fisheries Loan Fund to collect outstanding loans owed the U.S. All collections go into miscellaneous receipts. The statutory authorization for this loan fund expired on September 30, 1986.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Fisheries development and utilization projects initiated or continued ($-K)	75	75	15
Fisheries development and utilization projects completed ($-K)	60	60	10
Number of new or revised product specifications and standards	3	3	4
Cumulative number of product specifications and standards operational at EOY	37	40	44
Number of trade consultations conducted	2	2	3

Decreases for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Grants to states	Pos./BA	0	$6,655	0	0	0	-$6,655
	FTE/Obl.	0		0		0	

A decrease of $6,655,000 (object class 41.0) is requested for NOAA's fisheries grant-in-aid programs and three interstate fisheries commissions. The grant program structure provides only limited Federal control to ensure Federal concerns are addressed; projects funded by these grants are more appropriately funded by the states. The grant programs involved are: the interjurisdictional fisheries grants ($3,500,000); the anadromous fisheries grants ($2,354,000); and, the striped bass grants ($471,000). Funding support for the three interstate fisheries commissions ($330,000) also is not requested.

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Fisheries development program..	Pos./BA	207	$12,254	121	$5,894	-86	-$6,360
	FTE/Obl.	216		130		-86	

Decreases totalling 86 positions and $6,360,000 are requested to reduce or terminate lower priority fisheries development activities. NOAA will serve as a catalyst for private sector initiatives in FY 1991 by providing a core product quality and safety research program.
A decrease of 86 positions and $4,400,000 is requested for product quality and safety research which is more appropriately performed by industry. This reduction will decrease research on the human health aspects of fishery product consumption, including those under DOC inspection. It will terminate utilization research at NOAA's fisheries research laboratories in Gloucester, MA; Seattle, WA; and Kodiak, AK, with work continuing at Charleston, SC, and Pascagoula, MS, at significantly reduced levels. Harvesters, processors, distributors and retailers that benefit from domestic and foreign consumer demand should provide the necessary quality and safety information. This reduction will result in closure of NOAA's fisheries research laboratory in Gloucester, MA.

A decrease of $942,000 (object class 25.0) is requested for fish oil research activities. This funding was provided in FY 1990 for producing refined fish oil which is then provided at no cost to the National Institutes of Health for use in medical research. This project should be funded by industry since they will directly benefit from products that this research is expected to generate.

A decrease of $188,000 (object class 25.0) is requested for Mahi Mahi export strategies in the Hawaiian Islands. Funds were provided in FY 1987 through FY 1990 to develop the market potential of Mahi Mahi and export strategies to compete in model markets. The work is anticipated to be completed in FY 1990 and therefore additional funding is not required. Continuation of this type of market analysis should be funded by industry since it is the direct beneficiary of increased markets.

A decrease of $500,000 (object class 25.0) is requested for shellfish water standards research, directed by a Congressional add-on in FY 1990. Since the majority of shellfish beds fall within state jurisdictions, this project should be continued by the benefiting coastal states. These states will also have complete access and control of the data management system.

A decrease of $330,000 (object class 25.0) is requested for the Model Seafood Inspection Program. Funds for this activity were provided by Congress from FY 1987 through FY 1990 to develop alternative systems for the inspection of fish and fishery products. This program is scheduled for completion during FY 1990.

Additional Resource Information

(dollar amounts in thousands

Resources for sub-line item detail are reflected below:

	1989 Actual		1990 Currently Available		1991 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
Grants to states						
Anadromous grants (P.L. 89-304).....................................	0	$2,825	0	$2,825	0	$0
Interjurisdictional Fisheries grants (P.L. 99-659).................	0	3,500	0	$3,500	0	0
Interstate Fisheries Commissions (P.L. 99-659).....................	0	330	0	330	0	0
TOTAL	0	$6,655	0	$6,655	0	0
Fisheries development program						
Fisheries trade activities..	38	1,388	27	1,388	38	1,388
Product quality and safety..	169	8,359	169	8,466	83	4,506
Shellfish water standards research..................................	0	500	0	500	0	0
Fish oil research...	0	942	0	942	0	0
Mahi mahi expert strategies...	0	188	0	188	0	0
Model seafood inspection study......................................	0	330	0	330	0	0
TOTAL	207	$11,707	196	$11,814	121	$5,894

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: State/Industry Assistance Programs
Program Change: Product quality and safety research

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(2,639)
11.9	Total personnel compensation	(2,639)
12.1	Civilian personnel Benefits	(660)
21	Travel and transportation of persons	(60)
22	Transportation of things	(14)
23.3	Communications, utilities and miscellaneous charges	(124)
24	Printing and reproduction	(16)
25	Other services	(2,835)
26	Supplies and materials	(9)
31	Equipment	(3)
99	Direct obligations	(6,360)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: National Marine Fisheries Service
Subactivity: State/Industry Assistance Programs
Program Change: Product Quality and Safety Research

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	14	(1)	52,020	(52,020)
	12	(6)	37,019	(222,114)
	13	(13)	44,021	(572,273)
	11	(27)	30,887	(833,949)
	10	(2)	28,113	(56,226)
	9	(28)	25,529	(714,812)
	7	(9)	20,868	(187,812)
Total		(86)		(2,639,206)
		0		0
Total full-time permanent		(86)		(2,639,206)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(86)
Other than full-time permanent	
Total	(86)
Authorized Positions:	
Full-time permanent	(86)
Other than full-time permanent	
Total	(86)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Marine Fisheries Service:											
Inspection and Grading Inspection and Grading........	FTE/obl.	124	6,155	124	8,300	124	8,300	124	11,000	0	2,700
Reimbursable obligations	FTE/obl.	124	6,155	124	8,300	124	8,300	124	11,000	0	2,700

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Climate and Air Quality Research:											
Interannual and Seasonal Climate Research..................	Pos./BA	34	8,163	34	8,224	34	8,260	34	8,260	0	0
	FTE/Obl.	33	8,163	33	8,224	33		33		0	
Long-Term Climate and Air Quality Research.............	Pos./BA	230	26,283	230	24,487	230	24,985	230	23,498	0	(1,487)
	FTE/Obl.	266	26,283	266	24,487	266		266		0	
Climate and Global Change..........	Pos./BA	0	9,000	8	18,005	8	17,914	48	86,914	40	69,000
	FTE/Obl.	0	8,809	7	18,196	8		38		30	
National Climate Program..........	Pos./BA	9	2,840	9	3,140	9	3,140	0	0	(9)	(3,140)
	FTE/Obl.	9	2,724	9	3,256	9	—	0		(9)	
Total	Pos./BA	273	46,286	281	53,856	281	54,299	312	118,672	31	64,373
	FTE/Obl.	308	45,979	315	54,163	316		337		21	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Climate Air Quality Research											
Interannual & Seasonal Climate Research	FTE/obl.	0	1,353	0	0	0	0	0	0	0	0 0
Long-Term Climate and Air Quality Research	FTE/obl.	79	7,115	79	11,091	79	11,091	79	9,388	0	(1,703)
National Climate Program	FTE/obl.	0	268	0	0	0	0	0	0	0	0
Reimbursable obligations		79	8,737	79	11,091	79	11,091	79	9,388	0	(1,703)

Justification of Program and Performance

Activity: Oceanic and Atmospheric Research
Subactivity: Climate and Air Quality Research

Goals and Objectives

Goal: To more effectively manage the Nation's oceanic and atmospheric resources by increasing our understanding of oceanic and atmospheric processes through monitoring and research.

Objectives: (1) To develop a predictive capability for interannual and seasonal climate fluctuations for North America and other economically and scientifically important areas. (2) To establish a critical observational data base and a capability to analyze and predict changes in long-term climate and air quality due to natural and human causes, such as increasing levels of radiatively important trace species and acid rain.

Base Program

Interannual and Seasonal Climate Research: To achieve the first objective, NOAA's Interannual and Seasonal Climate Research effort focuses on programs with a high probability of early and useful results. NOAA's laboratory scientists and external investigators focus on the El Nino/Southern Oscillation (ENSO) phenomenon because interannual and seasonal climate variations in the Northern Hemisphere have been correlated with abnormal sea-surface temperatures characteristic of an ENSO event in the equatorial Pacific. Predictions of seasonal climate fluctuations are possible once these correlations are well defined, and the physical processes are understood. NOAA's strategy is to: (1) acquire the essential data; (2) develop diagnostic and predictive models related to changes in the equatorial oceans; and (3) establish the relationship of those changes to widespread climate variations through data analysis and modeling. Specific research activities include:

- The International Tropical Oceans-Global Atmosphere (TOGA) program is testing a theory that large-scale periodic oscillations, particularly the ENSO, are the principal drivers of short-term climate variations over North America and other economically important regions. The World Meteorological Organization (WMO) is coordinating and managing this nine country monitoring effort in the Pacific. For its part, NOAA has begun a 10-year monitoring program to observe the oceanic and atmospheric signatures of an El Nino event and a research program to develop the capability for operational interannual climate forecasts. In 1991, NOAA will complete installation of the Pacific observational network planned for TOGA.

- The Equatorial Pacific Ocean Climate Studies (EPOCS) program supports TOGA by investigating the influence of ocean processes (primarily in the eastern tropical Pacific) on interannual climate variations and by improving projections of climate variations associated with the Southern Oscillation. NOAA seeks to develop a capability for real-time analyses and projections (in association with the National Meteorological Center/Climate Analysis Center) and for operational tropical ocean analyses using coupled ocean-atmosphere models. The research includes (1) analysis of operational ocean circulation model simulations, (2) reanalysis of atypical occurrences of ocean-surface warming in the tropical Pacific, (3) field and analytical studies contributing to development of operational products, models, and empirical studies of tropical Pacific ocean-atmosphere interaction, (4) relation of tropical Pacific and middle-latitude climate anomalies, and (5) predictability of ENSO. Semiannual expeditions to the equatorial Pacific to measure equatorial currents, ocean surface and atmospheric parameters, and sea-level changes are part of this effort to establish a time-series data base.

- OAR's long-range weather and seasonal climate prediction research program is developing and testing monthly and seasonal climate models based on the First Global Atmospheric Research Program Global Experiment data set.

- The International Satellite Cloud Climatology Program (ISCCP) collects meteorological satellite imagery data to determine the effect of clouds on the Earth's radiation balance. The first step in ISCCP is to convert the vast quantity of satellite data into a form amenable to systematic analysis.

Long-Term Climate and Air Quality Research: Trends in long-term climate are influenced by natural processes and human-induced modifications of these natural processes. Human activities may threaten the long-term stability of Earth's climate by changing the global temperature and modifying atmospheric chemistry. These threats include: (1) introducing radiatively and reactively important trace species into the atmosphere, thus hastening the onset of the "greenhouse" effect, (2) reducing the ultraviolet shielding effect of the stratospheric ozone layer, thus jeopardizing human health, and (3) changing the acidity and oxidant levels at the Earth's surface, thereby affecting vegetation, surface waters, and soil.

NOAA monitors important atmospheric constituents and studies ocean dynamics and processes linked to global air quality and climate changes. NOAA's research programs focus on: (1) observing atmospheric greenhouse gases and key acidic and oxidizing gases and aerosols that play important photochemical, radiative, and chemically reactive roles; (2) determining the dynamics and transport of these chemical species in the atmosphere and oceans and their transport across the air-sea interface; (3) evaluating their impact on climate and the global chemical balance; and (4) making measurements to determine critical oceanic parameters affecting long-term climate. This research addresses NOAA's second objective for climate and air quality research. Specific research activities include:

- **The Subtropical Atlantic Climate Studies (STACS)**, which investigates oceanic heat transport, a key element in the natural global processes affecting long-term climate changes. Field efforts focus on the Florida and Antilles currents. An important part of STACS is developing monitoring techniques such as the continuous recording of the transport variations of ocean currents and their heat flux across the Florida straits by measuring voltage differences in a submarine cable.

- **The Geophysical Monitoring for Climate Change (GMCC) program**, which measures the background concentrations of some atmospheric constituents, such as carbon dioxide, ozone, methane, water vapor, and halocarbons, that may influence the "greenhouse" effect. NOAA will continue solar-radiation measurements of the variability in the ultraviolet, optical, and infrared spectra and automated gas chromatograph measurements of significant atmospheric constituents. Automated measurements also will be collected for additional gas species that may play a role in climate change.

- **The Radiatively Important Trace Species (RITS) program**, which supports research and monitoring to understand the trends, sources, sinks, and behavior of RITS (such as nitrous oxides, methane, and chlorofluorocarbons) and to determine the climatic and chemical consequences of these species. NOAA will continue its program to upgrade measurement programs for these compounds, including sampling and field studies along ocean tracks. Recognizing the importance of tropospheric ozone, NOAA will continue work to characterize the concentration and transport of ozone and ozone precursors in the troposphere, including work with other agencies and countries to establish a long-term monitoring network.

- **The atmospheric chemistry program**, which focuses on understanding the role of acids and oxidants, such as ozone. Although the formal, inter-agency National Acid Precipitation Assessment Program (NAPAP) ends in FY 1990, NOAA will continue to investigate acid precipitation, primarily through support of the National Trends and Global Trends Networks, which monitor acidic deposition and precipitation chemistry. NOAA also is addressing the role of oxidants in the formation of pollution. Specifically, NOAA's research has recently uncovered the role of manmade and natural processes in the formation of rural ozone, which, in high concentrations, can cause crop damage and other deleterious effects. NOAA is studying the formation, transformation, movement, and removal of atmospheric oxidants, as well as their trends and distributions, to place national policy on a sound scientific basis.

- Climate modeling research at the Geophysical Fluid Dynamics Laboratory (GFDL), which tests the sensitivity of air and ocean systems to changes in solar radiation, atmospheric and oceanic conditions, and trace substances. Ultimately, this research will lead to better predictions of climate variations by improved reliability of coupled ocean-atmosphere models. Ongoing work focuses on: global balances of heat, salinity, and carbon dioxide; seasonal variations in oceanic transport; and the response of tropical oceans to fluctuating winds in relation to the El Nino current phenomenon. In addition, NOAA is developing, testing, evaluating, and applying a three-dimensional dynamical, chemical, and radiative model to simulate the response of global chemistry and climate to changes in radiatively important trace species.

Climate and Global Change: NOAA's Climate and Global Change Program is an integral part of the interagency U.S. Global Change Research Program (USGCRP). As part of this national program, NOAA is addressing an important aspect of global change--the global climate--because changing climate confronts us with significant economic, health, safety, and national security implications. NOAA has a significant role in operational observation, prediction, and information management efforts for the national global change effort. NOAA's role derives from its statutory responsibility to predict climate change and to provide related data, information, and services to the public and private sectors, research community, and other Federal agencies. NOAA's role is continuing to be integrated with the roles of other agency participants in global change, (NSF, NASA, EPA, USGS, etc.) through the Committee on Earth Sciences (CES).

NOAA's broad goal is to establish a new national information service based on reliable assessments and quantitative predictions of changing global climate. Once established, this new service will help NOAA provide high-quality predictions and assessments to other Federal agencies, the public and private sectors, and the international community. The near-term objective is to provide reliable predictions of global climate change and associated regional implications on timescales ranging from seasons to a century or more.

NOAA's FY 1991 base program of $18 million is focused within the context of three key objectives of the U.S. Global Change Research Program:

- Establish an Integrated Comprehensive Monitoring Program for Earth System Measurements on a Global Scale:

  - Long-term observations: As part of a comprehensive program to predict climate change on timescales of seasons or longer, NOAA is expanding and more sharply focusing its environmental observing system. Base program resources are being used for such high-priority activities as operational ocean, global sea level, and stratospheric monitoring.

  - Climate data services: NOAA is developing climate data bases, data sets, and data fields specifically for NOAA's climate and global change program which meet user requirements and can be easily accessed by the global change community.

- Conduct Focused Studies to Improve Our Understanding of the Physical, Chemical, and Biological Processes that Influence Earth System Changes and Our Understanding of Global and Regional Trends:

  - Climate process studies: The predictive capability that NOAA seeks requires a program of focused research designed to understand and describe the critical processes or conditions that characterize changes in the Earth's climate system. The base program includes resources to address: interannual climate variability through the Tropical Oceans and Global Atmosphere (TOGA) program, biogeochemical studies with an emphasis on radiatively important atmospheric trace gases, and a new research program on the global hydrological cycle; ocean circulation studies; and investigations of the role and effect of ocean biochemical processes on climate including carbon cycling and marine sulfur production and cloud feedback.

- Develop Integrated Conceptual and Predictive Earth System Models

  - Climate diagnostics and prediction: The climate diagnostics and prediction element will ultimately become the central component of NOAA's role in the national global change effort. It synthesizes the results of the other elements into meaningful products--climate predictions, assessments, and related information.

__National Climate Program__: The National Climate Program was established by an Act of Congress in 1978, amended in 1982 and 1986. The program's goal is to improved our understanding of natural and man-induced climate processes and to make useful climate information available to the public, industry, and state and local governments. No FY 1991 funding is requested for the National Climate Program.

__Output Performance Measures__

	1989 Actual	1990 Estimate	1991 Estimate
Scientific publications (refereed)	205	212	225
Technical publications	29	31	34
Conferences - NOAA presentations	50	54	55
Major field experiments	3	5	2
Operational models/algorithms developed	2	2	4

Changes for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Interannual and Seasonal Climate Research	Pos./BA	34	$8,260	34	$8,260	0	0
	FTE/Obl	33		33		0	

Variable Ship Costs ($420,000) - Variable ship costs associated with this line item support 100 days-at-sea and are requested under the Marine Services Subactivity.

		1991 Base		1991 Estimate		Inc (+) or Dec. (-)	
Long-Term Climate and Air Quality Research	Pos./BA	230	$24,985	230	$23,498	0	-$1,487
	FTE/Obl	266		266		0	

A decrease of $1,487,000 (object class 25.0) is requested reflecting the expiration of the National Acid Precipitation Assessment Program (NAPAP) in 1990.

Variable Ship Costs ($315,000) - Variable ship costs associated with this line item support 75 days-at-sea and are requested under the Marine Services Subactivity.

Changes for FY 1991

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Climate and Global Change	Pos./BA	8	$17,914	48	$86,914	40	+ $69,000
	FTE/Obl	8		38		30	

An additional $69,000,000 and 40 positions will fulfill NOAA's FY 1991 focused program responsibilities in the U.S. Global Change Research Program (USGCRP). Plans for NOAA's Climate and Global Change Program are coordinated with the other participating agencies and OMB through the Committee on Earth Sciences.

Global environmental issues, addressed by the U.S. Global Change Research Program (USGCRP), remain among the Bush Administration's top domestic priorities. The FY 1991 budget request presents an INTEGRATED U.S. Global Change Research Program -- i.e., individual agency proposals for global change taken together represent an effective national effort aimed at the goals and objectives of the Program as laid out in OUR CHANGING PLANET. The NOAA program seeks to provide reliable predictions of changing global climate and regional implications on timescales of seasons to a century or more. With increased funds, NOAA's Climate and Global Change Program will build on the Agency's programs currently underway in the areas of environmental prediction and information management.

In recognition of the high priority placed on effective data management within the U.S. Global Change Research Program, NOAA's FY 1991 proposal includes a significant effort designed to ensure that NOAA fulfills its global environmental science data management responsibilities. NOAA must take action now, in concert with NASA and other agencies, to lay the data management framework for handling the enormous data streams associated with this effort. NOAA scientists will be evaluating and developing products from this data that will have a significant impact on the Nation's strategy with regard to Global Change Research Program. These products will have far-reach in socioeconomic effects. The goal of this activity is to improve the Nation's global change science and services through the creation and application of new data management capabilities. This goal is important to meet the coming challenges of new environmental data streams, the demands and importance being placed on historical data streams, and the new demands for qualitative improvements within our data management systems to adequately handle future data in terms of quantity, quality, broader access, integration, and analysis. NOAA's existing data stream holdings, when coupled with portions of EOS data, will provide for the creation of global data sets in support of the U.S. Global Change Research Program. NOAA must begin immediately to design its portion of the EOS data system, to prepare and to integrate its existing data bases, to develop algorithms for these new products, and to initiate exploratory research and development which will provide access to this data by U.S. scientists and policy makers.

The increase for NOAA's focused program responsibilities in the U.S. Global Change Research Program includes the following elements (organized by CES objective):

- Monitoring (Earth-System Measurements) ($21,800,000):
  - In-situ Ocean Observations include support for routine upper ocean and marine surface observations as well as specific NOAA contributions to interagency global ocean description efforts like World Ocean Circulation Experiment.
  - Global Sea Level monitoring fulfills NOAA responsibilities to establish and maintain an operational in-situ network and apply remote sensing technologies such as GEOSAT.
  - Stratospheric Monitoring enhances NOAA's anticipated contribution to the joint NOAA/NASA Network for the Detection of Stratospheric Change.
  - Climate Diagnostics and Data Base Development will lead to routine climate and global change information products derived from satellite and in-situ observations; the development of an operational climate data assimilation program; and analytic and diagnostic studies associated with detecting and assessing climate change.
  - Measurement Technique Development with explicit ties to the Climate and Global Change Program will improve the calibration and testing of new remote sensing instrumentation (including EOS) and provide initial NOAA contributions to the development of new measurement/observational techniques.
  - Long-term Observing System Planning represents NOAA's contributions to a planning effort to design the USGCRP's earth system measurement program.
- Focused Studies (Earth-System Processes) ($18,300,000):
  - Interannual Climate enhances the TOGA Program to address a specific set of ocean/atmosphere interaction problems and prepare for routine predictions;

- Biogeochemical Dynamics ensures full funding for the NOAA Radiatively Important Trace Species Program and enhances studies to understand the role of marine phytoplankton in the production of cloud-nucleating sulfur compounds;

- Ocean Dynamics and Circulation supports two specific areas of mission-directed research which, when combined with the ocean observation elements described above, provide for an integrated NOAA contribution to interagency efforts to obtain a large-scale description of the global ocean and improve our understanding of the role of ocean dynamics in the global climate system;

- Global Hydrological Cycle improves our understanding of the global hydrological cycle as it pertains to climate change on seasonal to interdecadal and longer timescales; this project will provide the focus for NOAA contributions to the International Global Energy and Water Experiment (GEWEX) proposed by the WMO; and

- Ecosystems Response supports ecosystems dynamics research directed at understanding the impact of changes in the global climate system on marine ecosystems and resources.

- **Earth-System Modeling and Prediction ($12,000,000):**

  - Ocean modelling supports a focused effort to make use of recent improvements in ocean models and ocean-related data sets in the development and implementation of operational ocean models;

  - Extended Range Forecasting enhances operational climate analysis and forecast capabilities; and

  - Modeling Centers supports participation in interagency efforts to encourage the development and application of predictive models and analytical products. This project includes resources to enhance operational climate analysis and forecasting capabilities.

- **Global Environmental Sciences Data Management ($16,900,000):**

  - Production of global-change sets support the production of new global-scale information products from new satellite and in-situ data sources and from historical data holdings;

  - Ocean and atmosphere platform data requirements supports NOAA requirements for product development, data preparation and validation, algorithm development, and prototype investigations in support of the Earth-Observing-System mission; and

  - Data Access and functional systems to qualitatively improve access by the U.S. scientific community to NOAA data holdings through research, development, and implementation of new functional capabilities for processing, understanding, and disseminating environmental data, metadata, and information products.

Variable Ship Costs ($430,000) - Variable Ship costs associated with this line item support 100 days-at-sea and are requested under the Marine Services Subactivity.

Changes for FY 1991

(dollar amount in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
National Climate Program	Pos./BA	9	$3,140	0	0	-9	-$3,140
	FTE/Obl	9		0		-9	

A decrease of $1,090,000 is requested for the National Climate Program Office (NCOP). The Committee on Earth Sciences (CES) has effectively replaced the NCPO as th coordinating mechanism for global change, and climate monitoring, research, and predictions. Funding for interagency administrative activities of the Office, therefore, is not required. Other activities conducted by the NCPO, such as experimental forecasting, will be funded through NOAA's climate and global change program.

In addition, a decrease of $1,800,000 (object class 41.0) is requested for six Regional Climate Centers located in New York, Illinois, Nebraska, Nevada, South Carolina, and Louisiana. The funding responsibility for state and regional programs should be shifted to the direct beneficiaries. A decrease of $250,000 (object class 41.0) also is requested to eliminate a Congressional add-on for the Intergovernmental Panel on Climate Change. U.S. participation in international climate activities will be supported through the Global Change Program.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Climate and Air Quality Research
Program Change: Climate and Global Change

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	1,312
11.5	Other personnel compensation	4
11.9	Total personnel compensation	1,316
12.1	Civilian personnel benefits	274
21	Travel and transportation of persons	560
22	Transportation of things	505
23.1	Rental payments to GSA	77
23.2	Rental payments to others	1,424
24	Printing and reproduction	250
25	Other services	29,759
26	Supplies and materials	2,600
31	Equipment	12,000
41	Grants, subsidies and contributions	20,235
99	Direct obligations	69,000

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Climate and Air Quality Research
Program Change: Climate and Global Change

Title:		Grade	Number	Annual Salary	Total Salaries
Physical Scientist		SES	1	68,952	68,952
Physical Scientist		15	1	61,288	61,288
Computer Specialist		14	1	52,104	52,104
Fishery Biologist (Program Coordinator)		14	1	52,104	52,104
Physical Scientist		13	7	44,092	308,644
Oceanographer		13	1	44,092	44,092
Oceanographer		13	1	44,092	44,092
Programmer		11	2	30,937	61,874
Meteorologist		15	1	61,288	61,288
Research Meteorologist		14	1	52,104	52,104
Meteorologist		14	7	52,104	364,728
Meteorologist		13	8	44,092	352,736
Meteorologist		12	3	37,079	111,237
Computer Programmer		9	3	25,570	76,710
Computer Programmer		6	1	18,810	18,810
Technical information specialist		6	1	18,810	18,810
Total			40		1,749,573
Less lapse	25.00%		10		437,393
Total full-time permanent			30		1,312,180

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	30
Other than full-time permanent	
Total	30
Authorized Positions:	
Full-time permanent	40
Other than full-time permanent	
Total	40

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Climate and Air Quality Research
Program Change: National Climate Program Office

Object Class		1991 Increase/ (Decrease
11	Personnel compensation	
11.1	Full-time permanent	(504)
11.3	Other than full-time permanent	(25)
11.5	Other personnel compensation	(5)
11.9	Total personnel compensation	(534)
12.1	Civilian personnel benefits	(87)
21	Travel and transportation of persons	(40)
22	Transportation of things	(2)
23.3	Communications, utilities and miscellaneous charges	(3)
24	Printing and reproduction	(13)
25	Other services	(63)
26	Supplies and materials	(7)
41	Grants, subsidies and contributions	(341)
99	Direct obligations	(1,090)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Climate and Air Quality Research
Program Change: National Climate Program Office

Title:	Grade	Number	Annual Salary	Total Salaries
Director, National Climate Program	SES	(1)	74,902	(74,902)
Meteorologist	GM15	(1)	72,857	(72,857)
General Engineer	GM15	(1)	65,970	(65,970)
Economist	GM15	(1)	74,297	(74,297)
Physical Scientist	GM15	(1)	67,598	(67,598)
Meteorologist	GM14	(1)	58,039	(58,039)
Meteorologist	GM13	(1)	41,677	(41,677)
Secretary (Stenography)	GS9	(1)	30,992	(30,992)
Secretary	GS6	(1)	17,542	(17,542)
Total		(9)		(503,874)
Total full-time permanent		(9)		(503,874)

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	(9)
Other than full-time permanent	(1)
Total	(10)
Authorized Positions:	
Full-time permanent	(9)
Other than full-time permanent	0
Total	(9)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Atmospheric Programs:											
Weather Research...............	Pos./BA	300	35,510	300	39,224	300	39,690	300	35,594	0	(4,096)
	FTE/Obl.	291	35,465	291	39,269	291		291		0	
Solar-Terrestrial Services and Research.................	Pos./BA	71	4,481	71	4,550	71	4,705	81	6,205	10	1,500
	FTE/Obl.	68	4,481	68	4,550	68		76		8	
Total	Pos./BA	371	39,991	371	43,774	371	44,395	381	41,799	10	(2,596)
	FTE/Obl.	359	39,946	359	43,819	359		367		8	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Atmospheric Programs											
Weather Research................	FTE/obl.	13	4,599	13	7,081	13	7,081	13	5,485	0	(1,596)
Solar-Terrestrial Services and Research..................	FTE/obl.	4	4,413	4	5,384	4	5,384	4	1,732	0	(3,652)
Reimbursable obligations		17	9,012	17	12,465	17	12,465	17	7,217	0	(5,248)

Justification of Program and Performance

Activity: Oceanic and Atmospheric Research
Subactivity: Atmospheric Programs

Goals and Objectives

Goal: To provide the Nation with more accurate and timely forecasts and warnings of: (1) solar disturbances and their terrestrial effects and (2) weather events, particularly the severe weather which affects the Nation's economic productivity and causes loss of life and property.

Objectives: (1) To develop new cost-effective atmospheric observing systems, (2) to develop models that can improve our understanding and forecasting techniques for all types of weather, especially severe weather events, and (3) to provide improved forecasts and warnings of solar disturbances and their effects on communications, electronic navigation, power networks, space stations, and satellite systems.

Base Program

Weather Research--Improving our understanding of atmospheric physical processes and interactions of weather systems on all scales is essential to enhance the effectiveness of the National Weather Service (NWS) modernization. This research program has two major program elements:

1. Systems/Modernization. Improved forecasts and warnings require more frequent observations, faster communications, and better local data handling systems. NOAA is committed to major capital investments in remote weather observational systems, including NEXRAD Doppler radars, satellite, automated surface observations, and a central U.S. Wind Profiler Demonstration Network. Research is conducted to improve the spatial and temporal resolution of remote observations of the atmosphere and to integrate the resulting data into coherent four-dimensional physical descriptions of the atmosphere for use in weather forecasting research and operations. The primary research activities include:

- Development of profiling systems to remotely and continuously measure vertical profiles of wind speed and direction, temperature, humidity, and total water content. Specific efforts include (1) completing development, installation, and operation of 30 wind profilers; and continuing development of automated data-retrieval techniques using combinations of ground-based and satellite-borne wind profilers.

- Development of infrared Doppler multifrequency lidars as research tools to improve our knowledge of atmospheric winds, turbulence, aerosols, and moisture processes.

- Development of dual-polarization Doppler and multifrequency radars, Doppler lidars, and passive radiometers to study convective storms and their precedent conditions including in-cloud and entrainment processes.

- Improvement of short-range (2-12 hour) forecasting by introducing new local data system technologies and techniques into the operational weather services system. The Program for Regional Observing and Forecasting Services (PROFS) develops "tested" workstations for laboratory and forecast office environments to evaluate weather service requirements and prototype equipment such as Advanced Weather Interactive Processing System (AWIPS). Specifically, PROFS is developing capabilities to allow the forecaster to integrate, view, and manipulate observations from current and planned meteorological sensing systems using computer-assisted data display and synthesis techniques. The development of operational forecasting workstations for the modernization of the National Weather Service is a major focused effort of PROFS.

2. Forecasting Research. In addition to modernized observational systems and forecaster workstations, improved weather services require: (1) models based on sound mathematical and physical concepts of the atmosphere and (2) specific forecasting techniques. Scientific understanding of physical processes that govern the behavior of the atmosphere is essential to accurate models, which in turn, provide a tool for more accurate weather forecasts. Models also are important tools for generating National Meteorological Center forecast guidance. The specific activities include:

o Developing numerical models to simulate and predict the behavior of atmosphere in several spatial scales (synoptic weather, hurricanes, and mesoscale severe weather events). For example, the incorporation of advanced physics into the National Meteorological Center's (NMC) global model has led to an extension of 1.5 days in meaningful forecasting ability.

o Developing and implementing data-assimilation techniques using the products of new observing systems (e.g., profilers, NEXRAD), resulting in increased credibility in the model products.

o Working with NWS scientists to improve predictions by the National Centers and regional forecast and local service offices through field programs, data analysis and integration, algorithm development, and application of models. This activity will enhance the effectiveness of the National Weather Service modernization efforts.

o Investigating convective storms and their precursor conditions to better understand the processes involved in severe weather and developing prediction techniques and technology capable of increasing the lead-time and accuracy for NWS watches and warnings of storms that pose a significant threat to life and property.

o Undertaking field studies to determine the factors that influence hurricane development, track, and intensity variations and to improve hurricane prediction models.

o Providing grants to four states (Federal-State Cooperative Program in Weather Modification Research) for cloud-physics research and programs to evaluate techniques for increasing precipitation. The program is proposed for termination in FY 1991.

Solar Terrestrial Services and Research--Two major program elements are:

1. Forecasts and Warnings. NOAA's Space Environment Services Center (SESC), jointly operated by the Space Environmental Laboratory (SEL) and the Air Force Air Weather Service, engages in two principal activities:

o Real-Time Space Environment Monitoring by acquiring data on solar X-ray flux, energetic charged particles, and magnetic fields using space-environment monitors on GOES and polar-orbiting satellites. Data also are acquired from a ground-based magnetometer network and from National Solar Observatories (the USAF and Kitt Peak, Arizona), and the National Research Council of Canada and Australian solar observatories. Forecasts and Warning Activities by maintaining the national repository of real-time solar data, forecasts, and warnings; issuing forecasts and warnings to user, 24 hours/day, 7 days/week (over 1500 direct primary users); and disseminating products via telephone, teletype, commercial satellite broadcast, and weekly data summary bulletins. The SEL Data Acquisition and Display System (SELDADS) collects, processes, integrates, stores, and displays solar geophysical data from several national and international sources. Efforts will continue to improve SELDADS capabilities to speed the flow of worldwide information into and out of the SESC and to implement numerical forecast algorithms. SESC also is automating the analysis of synoptic maps of global solar magnetic structures to develop longer-term forecasts of solar activity. Under reimbursement, SESC provides specific support to major NASA missions.

2. **Technique Development**. Forecast and warning capabilities will be improved by developing the following:

- Advanced space-environment sensors (e.g., operational satellite sensors, such as the solar-wind monitor and the solar x-ray imager).
- Improved diagnostic and prediction techniques using data from the next generation of geostationary satellites.
- Theoretical models, both statistical and numerical, to forecast solar activity and disturbances affecting the earth.
- Improved sensor calibration and quality control.
- New statistical forecasting techniques for solar and geomagnetic activities.
- Numerical models, such as a magnetohydrodynamic model for propagation of solar-wind disturbances, which will be developed in cooperation with outside researchers.
- Expert systems for operational prediction of solar events.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Scientific publications (refereed)	150	150	142
Technical publications	30	30	26
Conferences - NOAA presentations	90	90	82
Workshop, conferences, and symposia sponsored	12	12	11
Major field experiments	1	1	1

Changes for FY 1991
(dollar amount in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Weather Research..	Pos./BA	300	$39,690	300	$35,594	0	-$4,096
	FTE/Obl.	291		291			

A decrease of $4,096,000 is requested within this line item: $1,883,000 for the Program for Regional Observing and Forecasting Service (PROFS); and $2,213,000 for Weather Modification State Grants.

A decrease of $1,883,000 is requested in PROFS. The PROFS mission to demonstrate techniques to integrate diverse data sets has been accomplished. These funds are not required as AWIPS moves from the definition phase to the development phase conducted by outside contractors. The remaining base of $1,883,000 will support the PROFS facility. Other researchers will be encouraged to use the facility for applications research on a reimbursable basis.

A decrease of $2,213,000 (object class 25.0) is requested for North Dakota/Utah/Nevada/Illinois weather modification grants, as well as the grant for preliminary work in Arizona. Results to date have not provided sufficient contributions to NOAA's mission to warrant continuing the program. Moreover, this type of state-oriented cloud physics and precipitation research is more appropriately the responsibility of the individual states receiving the direct benefits.

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Solar-Terrestrial Services and Research	Pos./BA	71	$4,705	81	$6,205	+10	+$1,500
	FTE/Obl.	68		76		+8	

An increase of 10 positions and $1,500,000 is requested to acquire and analyze solar-terrestrial data from new sources to provide and improve forecasts and warnings of solar disturbances.

By the February 1988 Presidential Directive on National Space Policy, NOAA (SEL) is the sole civil agency directed to "gather data, conduct research, and make predictions about the Earth's environment." The objective of the space-environment initiative is to allow SEL to meet the Nation's demand for the higher-quality space-environment services required to support the other efforts mandated by the Presidential Directive. This program to improve forecasting includes: immediate integration and application of new data sources vital to meet requirements for solar-terrestrial services; data technique development to improve monitoring and prediction; and research to better understand the physics of the solar-terrestrial system.

The Sun is the source of disturbances which produce damaging fluctuations in Earth's environment. SEL: (1) monitors the state of the sun, the interplanetary medium, and the ambient spacecraft environment and disseminates the data and indices to civilian and military users; (2) prepares and disseminates forecasts of solar-terrestrial conditions; (3) gives the data to the National Geophysical Data Center for archiving and for dissemination to the research community; (4) develops hardware and software to apply the data to improving forecast timeliness, accuracy, and applicability; and (5) lays the groundwork for future improvements in forecasting by performing research to understand the solar-terrestrial physics responsible for the creation of solar disturbances, their propagation through the interplanetary medium, and their effects on and within Earth's magnetosphere.

The Nation's successful use of space requires improved capability to measure and forecast the space environment. The National Space Policy envisions a Space Station, human exploration of the solar system, and a National Aerospace Plane. The commercialization of space for manufacturing, future space exploration programs, and defense reconnaissance and monitoring systems all depend upon measurements and forecasts of space environment conditions, including solar radiation events, that are more accurate and timely than currently available services. Failure to improve measurements and forecasts increases the risk of another avoidable major disaster occurring within our National Space Program.

The Nation is becoming increasingly dependent upon sophisticated electronic and other systems which can be affected by solar and geomagnetic activity. For example, in March 1989, major solar flares and their resultant geomagnetic storms caused: (1) NASA satellites in low-Earth orbit to lose altitude abruptly; (2) some NOAA satellites in low-Earth orbit to experience difficulty in maintaining attitude; (3) computer upsets in commercial spacecraft; and (4) the loss of electric power to 6 million people in Quebec. The service improvements and research outlined in this initiative will enable NOAA to provide reliable forecasts and monitoring which will allow for preventative actions.

Solar and geomagnetic activity will be at near-record levels in FY 1991 and for several years thereafter. Frequent solar flares, proton events, geomagnetic storms, and ionospheric disruptions will deleteriously affect communications, navigation, geophysical exploration, management of electrical power distribution networks, astronaut safety, satellite orbits, and other activities. It is anticipated that the following new and extremely valuable operational data on which this initiative is based will soon be available:

- Interplanetary scintillation data to track interplanetary disturbances in transit and give warning of geomagnetic storms.

- Vector solar magnetograms from research institutions for short-term flare forecasting.

- Improved energetic particle flux data from the GOES-I and subsequent satellites for spacecraft charging episodes.

- Solar wind speed, density, and magnetic-field data measured upstream from Earth to give "nowcasting" of geomagnetic storms;

- Images of the Sun taken in the light of soft x-rays for prediction of proton bombardments, geomagnetic storms, and heating of the terrestrial thermosphere.

Each new data stream--of enormous promise, beginning soon, and expected to continue indefinitely--requires new hardware, software, and techniques to ingest, use, archive, and perform research.

The proposed initiative contains several key elements:

- Increase forecasters' ability to specify and accurately predict the particle fluxes and geomagnetic variations in the near-Earth space environment. For example, observations of the plasma and magnetic field in the solar wind upstream of Earth will allow for a one-to-two-hour lead time in forecasting the onset, severity, and duration of geomagnetic storms which can disrupt satellite orbits, radio transmissions, and communications; solar x-ray images will enable evaluation of the geometric component of the proton bombardment threat to spacecraft and the National Aerospace Plane.

- Acquire computer hardware and software to carry out the operational, research, and technique development efforts.

- Carry out technique development based on research into the physical processes of solar and geomagnetic disturbances, leading to improved predictions.

- Implement expert systems using artificial intelligence techniques to provide numerical guidance to forecasters.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Atmospheric Programs
Program Change: PROFS

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	(21)
22	Transportation of things	(1)
23.3	Communications, utilities and miscellaneous charges	(3)
24	Printing and reproduction	(6)
25	Other services	(1,580)
26	Supplies and materials	(50)
31	Equipment	(222)
99	Direct obligations	(1,883)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Atmospheric Programs
Program Change: Space Environment Services Needs

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	322
11.9	Total personnel compensation	322
12.1	Civilian personnel benefits	83
21	Travel and transportation of persons	26
22	Transportation of things	125
23.1	Rental payments to GSA	13
23.3	Communications, utilities and miscellaneous charges	5
24	Printing and reproduction	4
25	Other services	472
26	Supplies and materials	250
31	Equipment	200
99	Direct obligations	1,500

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Atmospheric Programs
Program Change: Space Environment Services Needs

Title:		Grade	Number	Annual Salary	Total Salaries
Physicist		14	2	52,104	104,208
Physicist		13	3	44,092	132,276
Mathematician		13	1	44,092	44,092
Programmer		12	4	37,079	148,316
Physical Scientist					
Total			10		428,892
Less lapse	25.00%		2		107,223
Total full-time permanent			8		321,669

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	8
Other than full-time permanent	
Total	8
Authorized Positions:	
Full-time permanent	10
Other than full-time permanent	
Total	10

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Ocean and Great Lakes Programs:											
Marine Prediction Research.....	Pos./BA	182	15,247	182	17,743	182	16,074	181	11,532	(1)	(4,542)
	FTE/Obl.	179	16,189	179	17,743	179		178		(1)	
Sea Grant......................	Pos./BA	30	40,459	30	42,459	30	42,257	30	27,498	0	(14,759)
	FTE/Obl.	28	40,157	28	42,761	28		28		0	
Undersea Research Program......	Pos./BA	9	14,662	9	14,662	9	14,662	0	0	(9)	(14,662)
	FTE/Obl.	7	14,662	7	14,662	7		0		(7)	
Total	Pos./BA	221	70,368	221	74,864	221	72,993	211	39,030	(10)	(33,963)
	FTE/Obl.	214	71,008	214	75,166	214		206		(8)	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Oceanic and Atmospheric Research:											
Ocean & Great Lakes Program											
Marine Prediction Research.....	FTE/obl.	3	1,119	3	963	3	963	3	1,010	0	47
Undersea Research Program......	FTE/obl.	0	65	0	0	0	0	0	0	0	0
Reimbursable obligations	FTE/obl.	3	1,184	3	963	3	963	3	1,010	0	47

Justification of Program and Performance

Activity: Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Programs

Goals and Objectives

Goal: (1) To increase our understanding of coastal and marine processes for the purpose of predicting environmental changes. (2) Provide the technical basis for enhancing the Nation's marine economic sector.

Objectives: (1) To conduct research and technology transfer by capitalizing on the strengths of the existing network of in-house laboratories, universities and large national/international organizations to protect life and property, stimulate economic development, enhance competitiveness and foreign trade, and improve the quality of life for Americans and the global community. (2) To provide an economical and safe national capability for collecting in-situ data and making undersea observations essential to understanding marine physical, biological, and chemical processes.

Base Program

Marine Prediction Research - Supports NOAA's mission to improve the prediction and assessment of ocean, coastal, and Great Lakes processes, phenomena, and resources and to better use the resources of these areas. These research activities also involve a blending of capabilities existing in Federal laboratories, universities, and the private sector. Although observations comprise a major part of NOAA's marine research, numerical modeling is stressed as an integrating force to focus observational requirements, integrate knowledge, develop and improve quantitative prediction techniques, and aid in transferring research results to industry and to NOAA's operational services (e.g., NWS, NOS, NMFS). Marine research consists of two major program elements:

1. Marine Environmental Research - The following research is conducted to develop a sound scientific basis both for management, development, and use of coastal, estuarine, and Great Lakes waters and for understanding and predicting physical and chemical processes.

o Environmental processes research provides the scientific bases needed for sound environmental management. This research will make it possible to predict the impacts of our economical usage of coastal, estuarine, and Great Lakes waters. For example, NOAA has demonstrated that recirculation and sediment disturbances can keep pollutants active and biologically available longer than previously thought. NOAA is conducting research to understand the cycling, fates, and effects of toxic organics and nutrients and to determine the effects of human activities on the estuarine, coastal, and Great Lake habitats of fish and shellfish. NOAA will continue fundamental research to: (1) understand the relationships between physical and chemical variables and the productivity of estuarine and coastal ecosystems; (2) develop an understanding of how physical and biochemical processes in the estuarine and coastal environments affect the fates of pathogens and toxic chemicals introduced to these environments; and (3) develop and test models of contaminant behavior to support sound resource management decisions.

- **Seafloor processes research** is conducted to improve our understanding of the chemistry and thermal characteristics of the oceans, in particular the seafloor processes associated with hydrothermal vents found on the oceans' extensive volcanic ridges. NOAA's VENTS program seeks to identify vent systems, characterize the effluents, and develop an understanding of their life-history. These systems are now believed to have a significant effect on the thermal and chemical budgets of the overall oceans as well as on local circulation patterns. No funding is requested for VENTS in FY 1991.

- **Marine hazards and Lake hydrology research** improves the U.S. ability to: predict hazardous or special environmental conditions in the oceans, Great Lakes, and Alaskan Arctic; assess water resources of large lakes; and provide the information and data necessary for the safe and efficient use of the ocean, coastal, and Great Lakes areas. NOAA's major research activities will continue to improve the forecasting accuracy of: lake levels; hazardous winds, waves, and storm surges; and ice growth, movement, and breakup (results are transferred to NOAA operations (e.g. Joint Ice Center) for dissemination to international, Federal, state agencies, and to the public).

2. Marine Resources Assessment - This research provides the information and data to allow for the rational use and development of the marine resources of the Exclusive Economic Zone and the Fisheries Conservation Zone. The principal activity is fisheries recruitment research, which investigates the factors affecting the recruitment (or survival) of young year classes into the fishery stock. This research combines the talents and expertise of NOAA's fishery scientists, oceanographers, and meteorologists to understand the complex inter-relationships which affect fishery survival. The Fisheries-Oceanography Coordinated Investigations (FOCI) program seeks to identify and measure physical, chemical, and biological parameters affecting important fish stocks to determine how these parameters affect spawning, growth, survival, and recruitment. NOAA continues efforts in the Bering Sea and Gulf of Alaska to determine the effects of oceanographic variables on pollock. Data collected in the pollock-spawning area off Kodiak Island, particularly the data set on the 1985 year class spawned under unusual environmental conditions, are expected to be particularly valuable.

Sea Grant- The National Sea Grant College Program has developed a strong infrastructure of marine research and technology transfer at educational institutions. Although the previous Administration proposed terminating the program, this Administration requests funding for a restructured National Sea Grant College Program that focuses on NOAA-wide missions.

The objective of this program is to conduct research and technology transfer drawing upon a network of in-house laboratories and universities, and large national/international experiments to protect life and property, stimulate economic development, enhance competitiveness and foreign trade, and to improve the quality of life for Americans and the global community.

The original Sea Grant statute focused on support of marine resources and environmental research at the grassroots level. Over the past decade, through a series of management and legislative changes, the program has positioned itself to assume many of the mission-related marine R&D responsibilities. This evolution is consistent with the maturing of the Sea Grant network capability to address national issues. The National Sea Grant College Program is well poised to contribute to two NOAA initiatives - Global Change and Coastal Oceans. Sea Grant can draw upon a vast, existing network of over 200 participating institutions and more than 3,000 scientists, engineers, and students to focus on these timely and strategic climate, ocean, and coastal initiatives. Additionally, the Sea Grant program entrains approximately $29,000,000 in non-Federal and $4,500,000 in other agency pass-through funding to work on R&D of high NOAA and national relevance.

o The refocused Sea Grant program includes the following elements:

- **Environmental Studies:** Research on marine habitat studies, environmental processes, Great Lakes ecosystems, wetland rehabilitation, coastal productivity and a variety of chemical studies that relate to toxic and eutrophic contamination and gaseous exchanges related to global change. This research also is the underpinning of the environmental quality component of NOAA's Coastal Ocean Program.

- **Living Resources:** Research on a variety of animal and plant aquatic species, processes of fisheries recruitment and development, marine biotechnology related to developing new pharmaceutical and industrial feedstocks from the sea, and genetic engineering relevant to a variety of end uses from improving stocks of fish, mollusks, and crustaceans for human consumption to microorganisms for pollution abatement. This research area also includes a variety of programs in seafood science and technology to improve the shelf-life and healthfulness of seafood. This research contributes directly to NOAA's Coastal Ocean Program in biological and fishery productivity.

- **Non-Living Resources:** Geological and geophysical research that relates to the dynamics of coastal waters (coastal hazards) and the geological and environmental processes that affect coastal and beach stability (coastal processes) and the formation and distribution of mineral resources. Due to the critical relevance of in-situ observations to these studies, needed research in diving technology and physiology is also conducted.

- **Technology Transfer:** Comprehensive approach to technology transfer in the furtherance of NOAA missions and goals. This includes education at the graduate and post-doctoral level, public education, and specialized fellowships as well as basic research in marine policy and related ocean and coastal law, and social sciences. Specialized communication/networking and policy analysis on issues of national importance (e.g., marine debris, non-degradable pollution, and fishing boat safety) are a major focus for advisory service activities.

- **Marine Technology and Commercial Development:** Support ongoing programs in marine economics research, ocean engineering and marine transportation/ports systems. A recent appraisal of documentable Sea Grant dollar contributions to the national economy in 1987 was conservatively estimated to be $842,000,000--over twenty times the Federal investment! This figure does not include non-cash contributions to the national economy or health and welfare of the citizenry.

Undersea Research Program -- The goals of the National Undersea Research Program (NURP) are to maintain and operate undersea research facilities and platforms and to transfer technology and information produced by undersea marine research to those working in the undersea environment. No funding is requested for the NOAA Undersea Research Program in FY 1991.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Scientific publications (refereed)	593	610	443
Technical publications	240	247	99
Conferences - NOAA presentations	13	13	12
Workshops, conferences, and symposia sponsored	65	70	25
Major field experiments	12	11	0
Operational models/algorithms developed	1	1	1

Decreases for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Marine Prediction Research	Pos./BA	182	$16,074	181	$11,532	-1	-$4,542
	FTE/Obl	179		178		-1	

A total decrease of one position and $4,542,000 is requested within this line item: $1,600,000 for the Great Lakes Environmental Research Laboratory, $2,000,000 and one position for VENTS, and $942,000 for the Southeast Fisheries Oceanography-Coordinated Investigations.

A decrease of $1,600,000 is requested for the Great Lakes Environmental Research Laboratory (GLERL). This laboratory conducts environmental research with special emphasis on developing prediction tools for improved Great Lakes impact assessment and forecasting. In order to focus Federal expenditures on activities that are clearly the responsibility of the Federal Government, this proposal will reduce Great Lakes hazards and related research, particularly research on ice hazards, surface waves, and water level fluctuations, and will also reduce research related to pollution of the Great Lakes. Since these research activities are providing services specifically for the states surrounding the Great Lakes, those states and the private sector interests which derive direct benefit from these studies should assume a greater share of funding responsibility. The remaining research in the Great Lakes will enable the United States to meet the terms of the 1978 U.S.-Canada Water Quality Agreement.

A decrease of $2,000,000 and one position is requested for the VENTS research program. Research previously conducted by NOAA, other Federal agencies and universities already provide an understanding of seafloor spreading processes. Furthermore, economic and legal circumstances indicate that commercial development of seafloor mineral deposits is unlikely in the near future.

A decrease of $942,000 (object class 41.0) is requested to terminate the southeast Fishery Oceanography-Coordinated Investigations (FOCI) program which conducts fisheries recruitment research off the southeast coast of the United States. The Congressionally mandated southeast FOCI research program primarily passes through funds to the University of Miami to study fish in State waters. Unlike the northwest FOCI program, the southeast FOCI programs serves no Federal purpose and should be funded by the State or locality which directly benefits.

Variable Ship Costs ($561,000) - Variable ship costs associated with this line support 165 days-at-sea and are requested under the Marine Services Subactivity.

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Sea Grant	Pos./BA	30	$42,257	30	$27,498	0	-$14,759
	FTE/Obl	28		28		0	

A total decrease of $14,759,000 is requested within this line item: $13,300,000 for the National Sea Grant College Program, $1,177,000 for the National Coastal Resources Research and Development Institute and $282,000 for the U.S./Asia Aquaculture Science Exchange Program.

A decrease of $13,300,000 (object class 41.0) is requested as a result of refocusing the National Sea Grant College Program to concentrate on conducting only priority research and technology transfer for NOAA. The request would fund the research program approximately at its historical level. No funding is requested for the Marine Advisory Service (MAS) Agents. MAS Agents, who typically are stationed in the various coastal counties and serve as information/technology-extension personnel, would no longer receive Federal support. Instead, their support would be expected to come entirely from state, local, and private sources. MAS "Specialists" who engage in applied research relevant to NOAA's mission would continue to receive Federal support.

A decrease of $1,177,000 (object class 41.0) is requested for the National Coastal Resources Research and Development Institute. These passthrough funds are provided to conduct marketing activities and promote certain segments of the fishing industry. This is an inappropriate role for the Federal Government. These efforts should be funded by private industry.

A decrease of $282,000 (object class 41.0) is requested for the U.S./Asia Aquaculture Science Exchange program. An information exchange to promote aquaculture business ventures is not an appropriate NOAA role. This program should be funded by the non-Federal and private-sector organizations which will receive direct benefit.

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Undersea Research Program	Pos./BA	9	$14,662	0	0	-9	-$14,662
	FTE/Obl	7		0		-7	

A total decrease of nine positions and $14,662,000 is requested within this line item: $14,285,000 for the National Undersea Research Program and $377,000 for the Tropical Research facility in Key Largo, Florida.

A decrease of nine positions and $14,285,000 is requested to terminate the NOAA Undersea Research Program. Specifically, this decrease will terminate funding for: the use of deep and shallow-water submersibles; NOAA support (one-fifth) of the Navy-owned, deepsea research vessel ALVIN; studies of undersea diving techniques and equipment; biomedical research grants; and NOAA support of five undersea research programs administered regionally by the University of Connecticut at Avery Point, the University of North Carolina-Wilmington, the University of Hawaii, the Fairleigh Dickinson University, and the Caribbean Marine Research Center, and a west coast Undersea Research Program currently administered by the NURP headquarters in Rockville, Maryland. These programs should be funded from private and state resources or by other Federal agencies.

A decrease of $377,000 (object class 41.0) is requested to terminate Federal funding for the Key Largo Tropical Research Facility. This program should be supported by state and local governments and private sources which would receive direct benefit from the facility's research. The focus of the activities by this Facility is not central to NOAA's mission.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Programs
Program Change: GLERL

Object Class		1991 Increase/ (Decrease)
22	Transportation of things	(27)
25	Other services	(1,191)
26	Supplies and materials	(307)
31	Equipment	(75)
99	Direct obligations	(1,600)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Programs
Program Change: VENTS

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(57)
11.9	Total personnel compensation	(57)
12.1	Civilian personnel Benefits	(7)
21	Travel and transportation of persons	(7)
22	Transportation of things	(52)
23.1	Rental payments to GSA	(1)
23.3	Communications, utilities and miscellaneous charges	(0)
24	Printing and reproduction	(0)
25	Other services	(831)
26	Supplies and materials	(200)
31	Equipment	(283)
41	Grants, subsidies and contributions	(563)
99	Direct obligations	(2,000)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Office Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Programs
Program Change: VENTS

Title:		Grade	Number	Annual Salary	Total Salaries
Oceanographer		14	(1)	57,054	(57,054)
Total			(1)		(57,054)
Less lapse	0.00%		0		0
Total full-time permanent			(1)		(57,054)

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	(1)
Other than full-time permanent	
Total	(1)
Authorized Positions:	
Full-time permanent	(1)
Other than full-time permanent	
Total	(1)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Office of Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Program
Program Change: Undersea Research

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(388)
11.5	Other personnel compensation	(1)
11.9	Total personnel compensation	(389)
12.1	Civilian personnel Benefits	(42)
21	Travel and transportation of persons	(69)
22	Transportation of things	(2)
23.1	Rental payments to GSA	(15)
23.2	Rental payments to others	(110)
24	Printing and reproduction	(35)
25	Other services	(808)
26	Supplies and materials	(20)
41	Grants, subsidies and contributions	(12,795)
99	Direct obligations	(14,285)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Oceanic and Atmospheric Research
Subactivity: Ocean and Great Lakes Programs
Program Change: Undersea Research

Title:	Grade	Number	Annual Salary	Total Salaries
Director Undersea Research Program	15	1	62,873	62,873
Program Managers	15	2	62,873	125,746
Engineering Manager	14	1	53,452	53,452
Project Scientist	13	1	45,234	45,234
Physical Scientist	11	1	31,738	31,738
Program Assistant	9	1	26,231	26,231
Secretary	7	2	21,443	42,886
Total		9		388,160
		0		0
Total full-time permanent		9		388,160

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	7
Other than full-time permanent	
Total	7
Authorized Positions:	
Full-time permanent	9
Other than full-time permanent	
Total	9

975

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Weather Service:											
Operations and Research:											
Local Warning and Forecast.....	Pos./BA	3,007	251,156	2,951	256,233	2,951	259,126	2,880	261,851	(71)	2,725
	FTE/Obl.	3,432	243,938	3,376	266,862	3,376		3,311		(65)	
Central Forecast Guidance......	Pos./BA	339	28,047	339	28,536	339	28,394	339	28,394	0	0
	FTE/Obl.	274	27,805	274	28,778	274		274		0	
Atmospheric and Hydrological Research......................	Pos./BA	44	2,576	44	2,322	44	2,311	44	2,311	0	0
	FTE/Obl.	40	2,576	38	2,322	38		38		0	
Total	Pos./BA	3,390	281,779	3,334	287,091	3,334	289,831	3,263	292,556	(71)	2,725
	FTE/Obl.	3,746	274,319	3,688	297,962	3,688		3,623		(65)	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Weather Service:											
Operations and Research											
Local Warning and Forecast.....	FTE/obl.	728	55,218	708	65,599	708	65,599	708	73,493	0	7,894
Central Forecast Guidance......	FTE/obl.	69	5,879	69	1,982	69	1,982	69	1,971	0	(11)
Atmospheric and Hydrological Research......................	FTE/obl.	0	233	0	0	0	0	0	0	0	0 0
Reimbursable obligations	FTE/obl.	797	61,330	777	67,581	777	67,581	777	75,464	0	7,883

Justification of Program and Performance

Activity: National Weather Service
Subactivity: Operations and Research

Goals and Objectives

Goals: To provide timely and accurate meteorological, hydrologic, and oceanographic warnings, forecasts, and planning information to ensure the safety of the population, mitigate property losses, and improve the economic efficiency of the Nation.

Objectives: To improve the timeliness and accuracy of meteorological, hydrologic, and oceanographic services by developing new techniques and procedures, applying new technology, and improving methods of disseminating information to reach more people promptly in warning situations.

Base Program

NOAA provides around-the-clock weather and flood warning and forecast services to the public for the protection of life and property and to meet the needs of all segments of the economy. Weather services are provided by a nationwide network of offices that collect data, prepare state and local warnings and forecasts, and disseminate information to the population both directly and indirectly through the mass media. Data, analyses, forecasts, and outlooks used by field forecasters to prepare local forecasts are centrally processed by the National Meteorological Center (NMC). The NWS core mission also depends on the study, development, and testing of new methods for improving basic warning and forecast capabilities through research.

Local warnings and forecasts: Local weather services are provided through a national network of 52 Weather Service Forecast Offices (WSFOs), 220 more localized Weather Service Offices (WSOs), and 13 River Forecast Centers (RFCs).

o Weather warnings and forecasts: Both WSFOs and WSOs issue local warnings of severe weather such as hurricanes, tornadoes, severe thunderstorms, flash floods, and extreme winter weather.

    - WSFOs prepare forecasts for zones which are comprised of several counties that experience similar weather. Each WSFO has forecast responsibility for several zones which, together, comprise an area the size of an average state. WSFOs issue zone forecasts 4 times daily for a period out to 48 hours; a generalized statewide forecast twice daily; and a more general, extended 5-day forecast on a daily basis. WSFOs also provide the main field forecast support for the marine and aviation programs as well as guidance for the fire weather program.

    - All counties in the United States are assigned to specific WSOs or WSFOs for warning purposes. These offices issue and distribute local warnings of severe weather for their assigned counties. WSOs adapt generalized weather forecasts to local areas and issue severe weather and flash flood warnings.

- To prepare local warnings and forecasts, WSFOs use forecast guidance prepared by the National Meteorological Center (NMC) that is based on worldwide meteorological observations. The National Severe Storms Forecast Center (NSSFC) and the National Hurricane Center (NHC) also provide central support for the local warning program.

- Weather Service Meteorological Observatories (WSMOs) are additional sources of data for surface observations, upper air observations, and/or radar data. These observations are also used in the NMC data base for generating guidance products used by field forecasters.

o River and flood warnings and forecasts: RFCs prepare guidance used by WSFOs, and WSOs to issue flash flood watches, warnings, and river forecasts. RFCs provide forecasts of river stage and flow and related products and services for use by water resources managers and other users. Most WSFOs and WSOs support the RFCs by collecting and relaying hydrologic data. NMC provides central support to RFCs by forecasting the movement of large storms that are causing significant precipitation.

o Marine weather services: Using weather analysis and forecast guidance provided by NMC, marine weather forecasters at coastal and Great Lake WSFOs issue wind, wave, weather, and ice warnings, forecasts, and other information for the population living and working along the sea coast, off-shore, on the Great Lakes and the high seas. Principal products include small craft advisories, gale, storm, tropical cyclone, and storm surge warnings; coastal, off-shore, and high seas forecasts; sea and swell forecasts; sea and lake advisories; and special weather forecasts to aid in the containment and clean up of oil spills and other hazardous substances in the marine environment. Legislation will be proposed to permit the Marine Weather Services Program to be financed from a Harbor Maintenance Trust Fund transfer to the proposed Marine Waterways Trust Fund. The Harbor Maintenance Trust Fund was established by P.L. 99-662, Title XIV and derives its revenue from a user fee on commercial cargo. The proposed legislation will increase the fee to provide the necessary additional revenues. Under this proposal the Marine Weather Services Program would be funded by a reimbursement to the OR&F account from the Marine Waterways Trust Fund.

o Agricultural weather services: NWS provides the Nation with agricultural weather services, including observations, forecasts, warnings, and farm advisories. Its aims are to improve agricultural efficiency, conserve energy, and protect the environment. As part of the agricultural weather services, NWS issues warnings of low temperatures injurious to winter and spring crops, particularly in citrus and deciduous fruit-growing areas. The 1991 budget proposes that users of these specialized services purchase them directly from the private sector.

o Fire weather services: Designated NWS offices provide weather warning, forecast, and advisory services to Federal, state, and local wild land management agencies to support wildfire control and suppression activities. Localized weather forecasts are issued, as required, during a fire. NWS offices also provide site-specific forecasts and advisories to Federal natural resource agencies for prescribed burning and smoke management, insect and disease control, planting and cultivating new growth, preservation of watersheds, and promotion of wildlife habitat and recreational facilities. The 1991 budget proposes that state and local users of these specialized services purchase them directly from the private sector.

o Tsunami warnings: Tsunami watches and warnings for Pacific Ocean areas and Alaska are prepared and issued by the Tsunami Warning Center at Ewa Beach, Hawaii, and the regional center at Palmer, Alaska. NWS collects and analyzes observational data from an international network of seismological observatories and sea level observing stations which operate on a cooperative basis. The centers use the data to prepare watches and warnings covering all U.S. territories and states bordering on the Pacific Ocean and disseminate them to WSFOs, Federal and state disaster agencies, military organizations, private broadcast media, and other facilities that furnish warning information to the public.

Central forecast guidance: Over the last several decades, NOAA has made major improvements in forecasting synoptic-scale (large-scale, slowly evolving) weather. With continuing improvements in larger scale, centrally prepared weather guidance products for day 2 and beyond; implementation of NWS systems upgrades; advanced observations from the planned geostationary and polar-orbiting satellites; and the development of mesoscale predictive techniques for NWS field operations, NOAA can implement significant improvements in the severe weather and flood warnings program.

- o General weather guidance: The National Meteorological Center (NMC) provides centralized processing of data, analyses, forecasts, and outlooks required by field forecasters as a basis for local forecasting. The Center, using numerical forecasting techniques run on large computers, provides the NWS, other government agencies, private industry, and foreign users, with guidance forecasts covering periods out to 10 days. When necessary, NMC provides guidance in tracking hurricanes (to 72 hours) and in forecasting the movement of large storms causing significant precipitation.

  In the course of its 24-hour-per-day, year-round operation, NMC receives approximately 50,000 daily surface observation reports from land stations, 3,000 reports from ships, 4,100 upper air observations, and 3,000-4,000 reports from aircraft. Weather satellites provide cloud images, atmospheric temperature soundings, and sea-surface temperatures. Ocean buoys provide additional information on sea temperatures, ocean currents, and air-sea interactions. These data are processed, catalogued, used in the various forecast guidance model runs, and distributed widely to field offices, other government agencies, private subscribers, and overseas users.

  NOAA will continue to incorporate improvements in general weather guidance by:

  - Implementing second generation Regional Analysis and Forecast Systems (RAFS) models with higher resolution and improved physics to forecast more accurately severe thunderstorms, heavy rain, and snow;
  - Implementing second generation hurricane models to predict with more precision the development and movement of hurricanes; and
  - Continuing improvements in 1 to 2 day and 3 to 10 day forecasts through acquisition of increased computer capacity to handle state-of-the-art physics, increasing resolution, and analysis.

- o Severe storm guidance: The National Severe Storms Forecast Center (NSSFC), in Kansas City, MO, prepares and releases messages of expected severe local storms, including tornadoes. These Tornado or Severe Thunderstorm Watches, include information for public use and aviation services. NSSFC meteorologists continuously monitor weather developments and issue watches when needed. NOAA will continue to develop systems application programs designed to streamline use of the satellite and numerical weather prediction data by forecasters to improve severe storm guidance.

- o Hurricane guidance: Two Hurricane Forecast Centers forecast the path and intensity of hurricanes, other tropical disturbances, and associated sea conditions. These two centers are the National Hurricane Center (NHC) in Miami, FL, and the Central Pacific Hurricane Center (CPHC) in Honolulu, HI. A portion of NHC's responsibility for public warnings rests with the Hurricane Warning Office at San Juan, PR. NMC provides forecast guidance on the track and intensity of hurricanes based on numerical models.

  Special hurricane forecasting staff at NHC base their predictions, advisories, and warnings on subjective and objective methods. The hurricane forecasting functions at the NHC and CPHC are integrated with the regular forecasting functions of the Weather Service Forecast Offices at which these Centers are located. NOAA will continue to improve hurricane guidance through development of techniques and programs that maximize use of satellite data and through implementation and calibration of storm surge models.

- Long range (climate) guidance: The Climate Analysis Center prepares monthly and seasonal (90-day) outlooks; collects and analyzes data to depict current anomalies of climate; and develops predictive techniques, performs diagnostic studies of large-scale climate anomalies, and conducts stratospheric research, all to improve accuracy of climate outlooks. NOAA will continue to incorporate improvements in long-range climate guidance.

Atmospheric and hydrological research: NWS conducts applied research, building upon the more basic research conducted by NOAA laboratories and the academic community. Applied meteorological and hydrological research is integral in providing more timely, accurate weather and flood warning and forecast services to the U.S. public.

- Meteorological research: NWS will conduct meteorological research to develop, test, evaluate, and improve numerical models and analysis/forecast techniques used in weather and climate prediction including:
  - Techniques for predicting mesoscale phenomena (e.g., heavy precipitation, tornadoes, and severe thunderstorms). These techniques will be developed and improved to use digital data from new observing systems such as NEXRAD (Next Generation Weather Radar) with doppler capability, and GOES-NEXT (geostationary satellites with higher resolution).
  - Models to improve hurricane tracking, hurricane probability estimates, and tropical analyses.
  - Storm surge models to assist in developing hurricane evacuation plans for coastal basins.
- Hydrological research: NWS will develop improved hydrologic and hydrometeorological models and procedures in support of the national flood forecasting and water resources forecasting programs including:
  - Improvements to the extended stream flow prediction model and its complementary models in the National Weather Service River Forecast System;
  - Specialized flood and flash flood forecasting procedures using linked hydrological and meteorological models; and
  - Algorithms to combine NEXRAD precipitation estimates with data from satellites and other ground-based observation systems.

Modernization and Associated Restructuring: The NWS has begun the process of modernization and restructuring which was prompted by two factors: (1) the need to apply advances in hydrometeorological science and technology to operational forecasting, and (2) the need to replace obsolete and increasingly unreliable equipment.

These factors offer the opportunity to improve severe weather and flood warnings and forecasts through the acquisition of the following new, technologically advanced systems:

- Automated Surface Observation Systems (ASOS) to reduce time-consuming manual observations, provide continuous weather watch, and permit increased staff productivity;
- Next Generation Weather Radar (NEXRAD) with doppler capability and sophisticated software to provide nationwide coverage for timely and accurate detection of severe weather and floods;

- o Advanced Weather Interactive Processing System (AWIPS) to enable local forecasters to integrate, process, and transmit high-volume radar, satellite, upper air, surface observation data and guidance information; and
- o Class VII computer power at the NOAA Central Computer Facility to accommodate advanced numerical weather prediction models and increased data to improve accuracy of forecast guidance.

These systems upgrades, coupled with observations from planned, advanced geostationary and polar-orbiting satellites and newly developed mesoscale forecasting techniques, will greatly improve the timeliness and accuracy of severe weather and flood warnings to the U. S. public. Improved capability to detect and predict the small-scale, short-lived (mesoscale) phenomena which cause the most destructive weather events will increase warning lead times for severe thunderstorms, tornadoes, high winds, and flash floods, as well as reduce false warnings.

A Strategic Plan for the Modernization and Associated Restructuring of the National Weather Service was submitted to Congress in 1989. Implementation of the plan will optimize efficiency and effectiveness of the mesoscale warning and forecast program. It also will include an operational demonstration and evaluation program as required by Public Law 100-685 to refine operational procedures and resolve implementation issues best addressed through actual field experience. Continued improvements in larger scale, centrally prepared weather guidance products for day 2 and beyond through advanced forecasting models and the requested increased computer processing capability are essential to successful implementation of mesoscale forecasting in NWS field operation, where field forecasters will concentrate on the small-scale, short-lived processes that occur in the zero to 36 hour time-scale.

The National Implementation Plan, submitted annually to Congress, will provide a planning framework and general strategies for accomplishing the transition. The interrelationships of all of the activities--facilities preparation, staffing augmentation, training, commissioning of systems, and realigning operations and services--have been planned so that the demonstration can begin in FY 1993. In addition to preparations for the demonstration, nationwide planning and implementation have begun. Facilities preparation is on-going. Training schedules for field personnel are being planned with necessary backup personnel to cover operational shifts. Software development continues. New communication channels are being established. All NWS offices are working on detailed site plans for the transition.

The NWS modernization effort involves internal NWS activities and multiple contractor efforts. Internal activities include the provision of land, facilities, software, training, staffing, and new operational procedures. Major system upgrades are being procured through external contractors which also provide software and training related to the system operation.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Local warnings and forecasts			
Percent of surface observations accuracy	99	99	99
Percent of automatic weather station availability	98	98	98
Percent of upper air data availability	97	96	96
Percent of upper air ground equipment availability	98	98	98
Percent of radar data availability	95	92	92
Percent of radar equipment availability:			
WSR-74S	92	92	92
WSR-74C	98	95	94
WSR-57	92	88	86
Percent of data availability from moored buoys:			
Meteorological observations	89	85	85
Wave measurements	87	80	80
Percent of data availability from Coastal-Marine Automated Network (C-MAN)	94	85	85
Facsimile charts transmitted daily	875	869	869
Percentage of charts transmitted within 2 hours of availability	96	94	94
Percent of major equipment availability	98	98	98
Percent of NWS stations with full standby power	84	87	87
Percent of NWS facilities meeting operational adequacy criteria	80	80	80
Percent of AFOS equipment availability	98	98	97
Percent of NOAA Weather Radio and/or powered translators continuously on air	99	99	99
Central forecast guidance			
Percent of successful Nested Grid Model (NGM)	98	98	98
Percent of successful surface analyses	100	100	100
Percent of successful radar charts	99	99	99
Atmospheric and hydrological research			
New coastal basins in which storm-surge model implemented	2	2	2

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec(-)	
Local warnings and forecasts	Pos./BA	2,951	$259,126	2,880	$261,851	- 71	+$ 2,725
	FTE/Obl.	3,376		3,311		- 65	

NOAA requests an increase of 38 positions and $11,000,000 for the Modernization and Associated Restructuring Demonstration and Implementation (MARDI) program to prepare for the multi-site operational demonstration required by Public Law 100-685. This funding is necessary to prepare for implementation of the modernization program nationwide in a manner consistent with the certification requirements of Public Law 100-685.

Modernization and Associated Restructuring Demonstration: In order to ensure a successful Modernization and Associated Restructuring Demonstration (MARD), a number of preparatory activities will be accomplished prior to the actual demonstration. MARD office staffs will be supplemented with additional meteorologists and scientific education on the interpretation of new data sources, such as doppler radar. Mesoscale forecasting techniques will be provided for meteorologists and hydrologists at these MARD offices. In addition, the new technology systems must be deployed, integrated with not only each other but also existing systems at the MARD offices, and commissioned to ensure that each performs its unique, but complementary role in supporting modernized operations. All of these activities must be completed with sufficient lead time to allow the MARD offices to stabilize and become proficient in the Weather Forecast Office (WFO) mode of operation prior to the start of the formal demonstration.

A formal MARD evaluation program also is planned to take place in parallel with the formal demonstration to provide results for the certification process. The Secretary of Commerce must certify that no service degradation will occur in areas served by offices that are to be consolidated as part of national implementation of modernization and associated restructuring. As specified in Public Law 100-685, the results of MARD will be critical evidence for this certification.

National Implementation: Field restructuring will proceed after MARD is completed, though there are a number of activities associated with national implementation that must be accomplished before, during and after the demonstration. Funding will be provided by other budget initiatives for some of these activities such as system user training, covered in each of the new technology programs. MARDI will cover other national implementation activities for which no other source of funding exists. NWS experiences both office and personnel relocations every year, and funding for these is covered by the NWS base budget. Because of the magnitude of the modernization and associated restructuring program, there will be an increase in the number of office and personnel relocations. Additional funding is proposed to cover these increased costs.

A comprehensive scientific education program will be conducted to prepare all NWS forecasters to understand atmospheric dynamics that define the development of fine scale weather phenomena. Meteorologists and hydrologists must understand what the high volume, high resolution data sets provided by the new technologies mean and how to interpret and integrate these data sets. Scientific education will also concentrate on use of mesoscale forecasting techniques in preparing warnings and forecasts.

As described above, Public Law 100-685 requires certification that no service degradation will occur in an area as a result of office consolidation. This requirement constrains the ability of the NWS to shift staff from offices not slated to become WFOs to newly opened WFOs as these new WFOs come up to speed and are able to assume increasing responsibility. Therefore, MARDI provides a temporary staffing augmentation during the transition period.

A decrease of 109 positions and $8,275,000 is requested as follows:

- WSFO Staff Reduction.................	35/-787	- Fire Weather............	-8/-470
- Consolidate Southern Region HQ......	-18/-852	- Susquehanna River.......	0/-700
- Data Buoy Maintenance................	0/-565	- Colorado River..........	0/-300
- Data Buoy Center.....................	0/-540	- Contract Observers......	0/-200
- Consolidate Pacific Region HQ.......	-11/-383	- Equipment Maintenance...	0/-1,054
- Agriculture and Fruit Frost.........	-37/-2,424		

Thirty-five positions and $787,000 represent reductions in staff at 8 Weather Service Forecast Offices (WSFO's). This reduction will not effect station hours of operation.

Location: Positions will be reduced at the following NWS offices:

Juneau, Alaska
Albany, New York
Portland, Maine
Lubbock, Texas
San Juan, Puerto Rico
Milwaukee, Wisconsin
Cheyenne, Wyoming
Reno, Nevada

NWS proposes to streamline its management by reconfiguring the current four-region management structure (for the lower 48 states) into a three-region structure. This will permit savings of 18 positions and $852,000. The Southern Region Headquarters in Fort Worth, Texas, will be consolidated with the NWS Central Region Headquarters in Kansas City, Missouri and the Eastern Region Headquarters in Garden City, New York. The Central and Eastern Region Headquarters staff will be augmented to ensure continued effective management of field operations.

Location: The Fort Worth, Texas, NWS Regional Headquarters will be closed but the WSFO in Fort Worth will remain in operation.

Savings of $565,000 (object class 25.0) will be achieved by discontinuing maintenance of the four non-essential moored buoys suurrounding Hawaii. A reduction of $540,000 (object class 25.0) is requested for the NOAA Data Buoy Center (NDBC) to realign staffing and anticipated workload.

NWS proposes to further streamline management by consolidating managerial functions of the Pacific Region Headquarters and the Alaska Region Headquarters Offices. This will permit savings of 11 positions and $383,000. The new Pacific-Alaska Region Headquarters will be located in Anchorage, Alaska. The existing Pacific Region Headquarters Office in Honolulu, Hawaii, will be converted to a logistics support office for the southern portion of the Pacific-Alaska Region. The consolidation will streamline NWS management and support functions and does not affect provision of weather services.

Location: Positions will be reduced at the Honolulu, Hawaii, NWS Regional Headquarters.

A savings of 29 positions and $1,745,000 will result from eliminating the specialized agricultural weather services program. At the direction of Congress and the expense of the general taxpayer, NWS provides specialized weather warnings, forecasts and advisories to profit making farming and ranching operations. These services are readily available for purchase from the private sector. NWS will continue to provide generalized public service weather forecasts to support agricultural operations, including the collection of observations at key points through a mix of automatic observational equipment, contract observations, and telephone answering equipment. Agricultural Weather Service Centers (AWSCs) and WSOs that primarily provide agricultural weather services will be closed and agricultural weather staff will be reduced.

Location: Office closures and position reductions will occur at the following NWS offices:

Closures Proposed

AWSC, College Station, Texas
AWSC, Stoneville, Mississippi
AWSC, Lafayette, Indiana
AWSC, Auburn, Alabama
WSO, Riverside, California
WSO, Yuma, Arizona
WSO, Twin Falls, Idaho

Staff Reduction Proposed

WSO, Grand Rapids, Michigan
WSO, Brownsville, Texas
WSFO, Great Falls, Montana
WSO, Wenatchee, Washington
WSFO, Salt Lake City, Utah
WSFO, Portland, Oregon
Camp Springs, Maryland

A decrease of 8 positions and $679,000 will result from eliminating the specialized fruit frost program. NWS provides a limited group of profit making companies, at the general taxpayers' expense, with specialized frost and freeze warnings and advisories. These profit making companies should purchase those specialized services from the private sector, where they are readily available. Public fruit frost forecasts will continue to be available to growers to aid in making decisions concerning crops.

Location: Position reductions will occur at the following WSOs:

Riverside, California
Tampa Bay, Florida
Brownsville, Texas

A decrease of 8 positions and $470,000 in the fire weather services program is proposed. NWS provides, at taxpayer expense, specialized forestry management services to non-Federal users, including advisories for controlled burning, pest management, and reforestation on non-Federal lands. Users of these specialized services should purchase site specific information directly from the private sector or through reimbursable arrangement with NWS. NWS will continue to provide support for very large, dangerous wildfires and for Federal forestry management activities such as controlled burning, pest management, and reforestation.

Location: Positions will be reduced at the following NWS offices:

Redding, California
Fresno, California
Boise, Idaho
Cheyenne, Wyoming
Camp Springs, Maryland
Silver Spring, Maryland

Reductions of $700,000 and $300,000 (object class 25.0) are requested for the Susquehanna and Colorado River Basin flood warning systems respectively. The equipment to provide these enhanced, localized services were installed at the general taxpayers' expense. The routine maintenance of these systems should be the responsibility of the state or region, as is the case with numerous similar flood warning systems across the country.

A reduction of $200,000 (object class 25.0) is requested for Congressionally mandated Stampede Pass, Washington; Sexton Summit, Oregon; and Blue Canyon, California contract observers. Observations will be maintained through the operational automated observing system at those locations.

A decrease of $1,054,000 (object class 41.0) is requested for equipment maintenance reflecting a stretch out of the maintenance schedule.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANCE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Modernization and Associated Restructuring Demonstration and Implementation (MARDI)

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	1,456
11.5	Other personnel compensation	52
11.9	Total personnel compensation	1,508
12.1	Civilian personnel benefits	389
21	Travel and transportation of persons	35
22	Transportation of things	88
23.2	Rental payments to others	1,684
24	Printing and reproduction	10
25	Other services	6,676
31	Equipment	610
99	Direct obligations	11,000

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Modernization and Associated Restructuring Demonstration and Implementation (MARDI)

Title:	Grade	Number	Annual Salary	Total Salaries
Meteorologist	13	10	44,092	440,920
Hydrologist	13	1	44,092	41,121
Meteorologist	12	24	37,079	889,893
Meteorological Technician	10	3	28,158	84,475
Total		38		1,456,409

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	38
Other than full-time permanent	0
Total	38
Authorized Positions:	
Full-time permanent	38
Other than full-time permanent	0
Total	38

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Reduce Staff 8 WSFO's

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(690)
11.5	Other personnel compensation	(39)
11.9	Total personnel compensation	(729)
12.1	Civilian personnel benefits	(95)
21	Travel and transportation of persons	(5)
25	Other services	42
99	Direct obligations	(787)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Reduce Staff at 8 WSFO's

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	12	(1)	35,825	(35,825)
	11	(3)	29,891	(89,673)
	9	(6)	24,705	(148,230)
	7	(8)	20,195	(161,560)
	6	(1)	18,174	(18,174)
	5	(4)	16,305	(65,220)
	4	(10)	14,573	(145,730)
	3	(2)	12,982	(25,964)
Total		(35)		(690,376)

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	(35)
Other than full-time permanent	0
Total	(35)
Authorized Positions:	
Full-time permanent	(35)
Other than full-time permanent	0
Total	(35)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Consolidate NWS Southern Regional HQ

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(720)
11.5	Other personnel compensation	(96)
11.9	Total personnel compensation	(816)
12.1	Civilian personnel benefits	(106)
21	Travel and transportation of persons	(9)
25	Other services	79
99	Direct obligations	(852)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Consolidate Southern Regional HQ

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	ES-00	(1)	75,473	(75,473)
	15	(2)	59,216	(118,432)
	14	(2)	50,342	(100,684)
	13	(4)	42,601	(170,404)
	12	(4)	35,825	(143,300)
	11	(1)	29,891	(29,891)
	10	(1)	27,206	(27,206)
	7	(1)	20,195	(20,195)
	6	(1)	18,174	(18,174)
	5	(1)	16,305	(16,305)
Total		(18)		(720,064)

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	(18)
Other than full-time permanent	0
Total	(18)
Authorized Positions:	
Full-time permanent	(18)
Other than full-time permanent	0
Total	(18)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Consolidate Pacific/Alaska Regional HQ

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(364)
12.1	Civilian personnel benefits	(76)
21	Travel and transportation of persons	(8)
25.3	Communications, utilities and miscellaneous charges	(4)
25	Other services	69
99	Direct obligations	(383)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Consolidate Pacific/Alaska Regional HQ

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	14	(1)	50,342	(50,342)
	13	(1)	42,601	(42,601)
	12	(2)	35,825	(71,650)
	11	(6)	29,891	(179,346)
	7	(1)	20,195	(20,195)
Total		(11)		(364,134)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(11)
Other than full-time permanent	0
Total	(11)
Authorized Positions:	
Full-time permanent	(11)
Other than full-time permanent	0
Total	(11)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Eliminate Agricultural Weather Program

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(1,051)
12.1	Civilian personnel benefits	(137)
21	Travel and transportation of persons	(26)
22	Transportation of things	(1)
23.1	Rental payments to GSA	(30)
23.3	Communications, utilities and miscellaneous charges	(16)
25	Other services	(484)
99	Direct obligations	(1,745)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Eliminate Agricultural Weather Program

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	13	(6)	42,601	(255,606)
	12	(19)	35,825	(680,675)
	11	(3)	29,891	(89,673)
	9	(1)	24,705	(24,705)
Total		(29)		(1,050,659)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(29)
Other than full-time permanent	0
Total	(29)
Authorized Positions:	
Full-time permanent	(29)
Other than full-time permanent	0
Total	(29)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Eliminate Fruit Frost Program

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(229)
11.5	Other personnel compensation	(56)
11.9	Total personnel compensation	(285)
12.1	Civilian personnel benefits	(37)
21	Travel and transportation of persons	(6)
22	Transportation of things	(1)
23.1	Rental payments to GSA	(11)
24	Printing and reproduction	(1)
25	Other services	(338)
99	Direct obligations	(679)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Eliminate Fruit Frost Program

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	11	(3)	32,879	(98,637)
	10	(3)	29,927	(89,781)
	8	(1)	24,605	(24,605)
	4	(1)	16,031	(16,031)
Total		(8)		(229,054)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(8)
Other than full-time permanent	0
Total	(8)
Authorized Positions:	
Full-time permanent	(8)
Other than full-time permanent	0
Total	(8)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Reduce Fire Weather Program

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	(284)
12.1	Civilian personnel benefits	(35)
25	Other services	(151)
99	Direct obligations	(470)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: National Weather Service
Subactivity: Operations & Research
Program Change: Reduce Fire Weather Program

Title:	Grade	Number	Annual Salary	Total Salaries
VARIOUS	13	(1)	46,861	(46,861)
	12	(1)	39,407	(39,407)
	11	(6)	32,879	(197,274)
Total		(8)		(283,542)

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	(8)
Other than full-time permanent	0
Total	(8)
Authorized Positions:	
Full-time permanent	(8)
Other than full-time permanent	0
Total	(8)

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Weather Service:											
Systems Acquisition:											
Public Warning and Forecast Systems.............	Pos./BA	39	63,150	39	161,425	39	100,941	39	177,467	0	76,526
	FTE/Obl.	119	42,082	119	147,316	119		119		0	
Total	Pos./BA	39	63,150	39	161,425	39	100,941	39	177,467	0	76,526
	FTE/Obl.	119	42,082	119	147,316	119		119		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Weather Service:											
Systems Acquisition Public Warning and Forecast Systems.............	FTE/obl.	0	6,310	0	109,666	0	109,666	0	96,780	0	(12,886)
Reimbursable obligations	FTE/obl.	0	6,310	0	109,666	0	109,666	0	96,780	0	(12,886)

Justification of Program and Performance

Activity: National Weather Service
Subactivity: Systems Acquisition

Goals and Objectives

Goals: To provide timely and accurate meteorological, hydrologic, and oceanographic warnings, forecasts, and planning information to ensure the safety of the population, mitigate property losses, and improve the economic efficiency of the Nation.

Objectives: To develop, acquire, and implement major new systems to modernize the National Weather Service in order to provide more timely and accurate weather and flood warnings and forecasts.

Base Program

Consistent with the goal of providing more timely and accurate weather and flood warning and forecast services to the U.S. public, NOAA proposes to modernize the national weather system during the 1990s through the acquisition of technologically advanced systems:

- NEXRAD (Next Generation Weather Radar) will replace existing obsolete weather radars and enhance severe weather and flood warnings. Nationwide implementation of this advanced doppler radar warning system can increase tornado warning lead times from the current average 1-2 minutes to 20-30 minutes and, equally important, reduce false warning rates. Also, more accurate mapping of precipitation will be possible on a wide scale, enabling extensive improvements in forecasting river plain flooding and flash floods.

  The NEXRAD Joint Systems Program Office FY 1989 activities included:

    - Installed and checked out the UNISYS preproduction unit at Norman, Oklahoma.
    - Conducted IOT&E(2) on the preproduction unit.
    - Continued land acquisition, engineering design and site preparation for NEXRAD radar/communications sites and user facilities.

  The NEXRAD Joint Systems Program Office FY 1990 plans are:

    - Exercised contract option for full-scale production.
    - Deliver limited production NEXRAD radar equipment to Oklahoma City, Oklahoma; Melbourne, Florida; Sterling, Virginia; and Kansas City, Missouri Training Center.
    - Train cadre of government instructors for operations and maintenance training of NWS field personnel.
    - Contract for depot spares.
    - Continue engineering design and land acquisition for NEXRAD sites.

The following table shows funding projections through FY 1995.

(Dollar amounts in thousands)

NEXRAD:	FY 1988 & Prior	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Budget Authority....	$128,324	$41,400	$71,400	$114,343	$107,420	$70,620	$36,997	$21,359
FTE..................	N/A	28	28	28	28	28	28	28

o ASOS (Automated Surface Observing Systems) will provide reliable, 24-hour per day, continuous surface weather observations. Implementation of ASOS into NWS field operations will reduce time-consuming manual observations, provide continuous weather watch, and yield improved staff productivity. NOAA is developing and competitively acquiring ASOS units in cooperation with DOT/FAA and DOD. NWS has the responsibility for acquiring, implementing, and maintaining planned NWS, FAA, and DOD ASOS units.

The ASOS Program Office FY 1989 activities included:

- Released Request for Proposal (RFP) for single contractor production and implementation activities.
- Completed interagency visibility sensor testing.
- Initiated preproduction system acceptance tests.

The ASOS Program Office FY 1990 plans are:

- Complete preproduction system acceptance tests.
- Complete preproduction field test and evaluation reports.
- Complete evaluation of production proposals.
- Award ASOS production contract.
- Begin ASOS limited production.
- Complete total of 572 site surveys; 163 NWS, 408 FAA, 1 Navy.

The following table shows funding projections through FY 1995.

(Dollar amounts in thousands)

ASOS	FY 1988 & Prior	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Budget Authority....	$27,750	$6,250	$8,725	$14,058	$15,233	$15,993	$ 4,883	$3,883
FTE..................	N/A	10	10	10	10	10	10	10

o **Advanced Weather Interactive Processing System (AWIPS)/NOAAPORT:** AWIPS will integrate all meteorological and hydrological data at the NWS field offices and provide, to the local field forecaster, the functional capability that has shown to significantly improve operational forecasts of the National Severe Storms Forecast Center and experimental warnings under NOAA's Program for Regional Observing and Forecasting Services (PROFS). In addition to supporting the remapping of GOES data, NOAAPORT will provide the communications capability needed to afford internal and external users with access to much of NOAA's real-time environmental data.

The AWIPS Program Office FY 1989 activities included:

- Awarded two AWIPS Definition Phase contracts.

- Initiated Phase II of NWS Modernization/AWIPS risk reduction activities at WSFO Denver.
- Conducted functional capabilities and acquisition strategies analyses with Definition Phase contractors.

The AWIPS Program Office FY 1990 plans are:

- Release RFP for Development, Deployment, and Operations Phase activ'ties.
- Conduct functional bench mark demonstrations on the proposed NARD prototype configuration.
- Conduct risk reduction activities, including central feed of NMC and NESDIS products, at Norman, Oklahoma.

The following table shows the AWIPS/NOAAPORT funding projections through FY 1995.

(Dollar amounts in thousands)

AWIPS	FY 1988 & Prior	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Budget Authority....	$32,908	$13,500	$13,560	$34,803	$31,186	$31,186	$31,186	$31,186
FTE.................	0	0	0	0	0	0	0	0
NOAAPORT								
Budget Authority....	$ 3,484	$ 2,000	$ 0	$ 7,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
FTE.................	0	0	0	0	0	0	0	0
TOTAL	$36,392	$15,500	$13,500	$41,803	$33,186	$33,186	$33,186	$33,186

- The NOAA Central Computer upgrade, begun in FY 1990, will lead to more accurate and more specific forecasts of major storms including hurricanes, severe thunderstorms, floods and winter storms, and more accurate general weather forecasts in the medium (3 to 10 day) and extended (30 day) range. Continued improvements in larger scale, centrally prepared weather guidance products for day 2 and beyond are essential to successful implementation of mesoscale forecasting in NWS field operations where field forecasters will concentrate on the mesoscale processes for forecasting less than 36 hours.

The National Meteorological Center's (NMC) Class VII acquisition plans are:

- Contract awarded in the first quarter of FY 1990.
- Installation and acceptance during the second quarter of FY 1990.

The following table shows the funding projections for a class VII computer system through FY 1995.

(Dollar amounts in thousands)

Central Computer Facility:	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995
Budget Authority	$7,800	$7,263	$7,263	$7,263	$7,263	$7,263
FTE	0	0	0	0	0	0

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Public warning and forecast systems	Pos./BA	39	$100,941	39	$177,467	0	+$76,526
	FTE/Obl.	119		119		0	

A summary of the requested change for each major system is as follows:

System	1991 Base	1991 Estimate	Difference
NEXRAD	$71,059	$114,343	+$43,284
ASOS	8,683	14,058	+5,375
AWIPS	13,436	34,803	+21,367
NOAA-PORT	0	7,000	+7,000
Central Computer Facility	7,763	7,263	-500

Next Generation Weather Radar (+$43,284,000) - NOAA requests an increase of $43,284,000 (object class 31.0 and 32.0) to fund the NWS share of the tri-agency NEXRAD program. Total contract cost estimates have not changed since the FY 1990 budget submission. An increase in FY 1991 is necessary to continue funding the NWS share of the production phase contract, to initiate logistics support activities to achieve scheduled milestones at least cost to the Government, and to continue NEXRAD radar/communication site and user facility construction. The Government exercised the firm fixed price contract option for full-scale production units in January 1990. Funding at the requested level is imperative to prevent schedule slippage in deployment of NWS NEXRAD systems and to replace existing obsolete radars to avoid escalation of disruptions in public warning services.

Automation of Surface Observations Program (+$5,375,000) - NOAA requests an increase of $5,375,000 (object class 31.0) for the Automation of Surface Observations Program. An FY 1991 increase is necessary to continue funding the NWS share of the ASOS full-scale production phase contract, to fund operation and maintenance of installed units and to train operators. The production contract is expected to be signed in early summer 1990.

Advanced Weather Interactive Processing System/NOAAPORT (+$28,367,000) - NOAA requests an increase of $28,367,000 (object class 25.0) for the AWIPS/NOAAPORT program in FY 1991. The requested level will allow completion of the Definition Phase efforts, initiation of the Development Phase (software and preproduction equipment required for the NARD sites), and provision for initial remapping of GOES data at NESDIS.

Efforts will also continue to derive critical information needed to define, analyze, and assess technical trade-offs and impact on operations and service from activities conducted in collaboration with OAR and NESDIS at Boulder/Denver, CO; Norman, OK; Kansas City, MO; and NOAA central facilities in the Washington D. C., area. These activities are the planned extension of in-house development and risk reduction activities conducted in FY 1988, FY 1989, and FY 1990. They will provide essential input to Government decisions on NWS modernization efforts and in the determination of the final characteristics of the AWIPS production units that will be deployed nationwide following the Development Phase.

NOAA Central Computer Facility (-$500,000) - NOAA requests a decrease of $500,000 (object class 25.0) for maintenance costs associated with the Class VII computer to be installed in the second quarter of FY 1990.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Environmental Satellite, Data, and Information Service:											
Satellite Observing Systems:											
Polar Orbiting System..........	Pos./BA	0	96,748	0	15,184	0	15,112	0	64,584	0	49,472
	FTE/Obl.	0	96,748	0	15,184	0		0		0	
Geostationary System...........	Pos./BA	0	185,332	0	135,997	0	135,348	0	109,146	0	(26,202)
	FTE/Obl.	0	185,332	0	135,997	0		0		0	
Landsat Commercialization......	Pos./BA	0	20,400	0	34,900	0	34,734	0	36,334	0	1,600
	FTE/Obl.	0	20,400	0	34,900	0		0		0	
Environmental Observing Systems	Pos./BA	486	56,883	486	56,917	478	57,692	478	48,192	0	(9,500)
	FTE/Obl.	467	59,883	467	56,917	459		459		0	
Total	Pos./BA	486	359,363	486	242,998	478	242,886	478	258,256	0	15,370
	FTE/Obl.	467	362,363	467	242,998	459		459		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Environmental Satellite, Data, and Information Service:											
Satellite Observing Systems											
Landsat Commercialization......	FTE/obl.	0	6,761	0	0	0	0	0	0	0	0
Environmental Observing Systems	FTE/obl.	0	2,162	0	19,710	0	19,710	0	19,200	0	(510)
Reimbursable obligations	FTE/obl.	0	8,923	0	19,710	0	19,710	0	19,200	0	(510)

Justification of Program and Performance

Activity: National Environmental Satellite, Data, and Information Service
Subactivity: Satellite Observing Systems

Goals and Objectives

Goals: To maintain a system of polar-orbiting satellites that obtain global environmental data; to maintain a system of geostationary satellites that provide near-continuous observations of the earth's western hemisphere; to monitor the earth's surface and space environment conditions; to introduce improved atmospheric and oceanic observations and data dissemination capabilities; to develop and launch one additional Landsat satellite (Landsat 6); and to develop and provide new and improved applications and products for a wide range of Federal agencies, state and local governments, and private users.

Objectives: Continue procurement of spacecraft, instruments, launch services, and ground equipment necessary to maintain uninterrupted operational polar-orbiting and geostationary satellite systems for the following purposes: (1) obtain quantitative environmental data such as temperature, moisture, wind, radiation flux, and solar energetic particle flux, used in numerical analysis and prediction programs; (2) locate and collect data from remote, fixed and moving platforms, such as buoys, balloons, and ships; (3) provide continuous imagery of the earth and its environment on a regular basis, including direct read-out and environmental data broadcasts to ground stations; (4) provide search and rescue data to locate aircraft and ships in distress; (5) operate and maintain the NOAA satellites and acquire data from them; (6) process and analyze the data from NOAA, DOD, and other operational and research Earth-observing satellites; (7) supply data, interpretations, and consultation services to users, and determine requirements for future satellite systems; (8) conduct research to improve satellite systems capability for obtaining environmental data; and (9) demonstrate better ways to use and distribute data from NOAA, NASA, and other satellites, aircraft, and laboratory investigations, and apply these improvements to satellite data products for operational use.

Base Program

NOAA procures, operates, and maintains the spacecraft and ground system components of two environmental satellite systems. The polar-orbiting satellite system obtains global environmental data; the geostationary satellite system provides near-continuous observations of the Earth's western hemisphere to support provision of weather warnings and forecasts and other applications. Qualitative data from these systems include visible and infrared images of cloud and weather features; quantitative data include measurements of the vertical temperature of the atmosphere, sea surface temperatures, cloud motion, winds, and solar environmental data. The basic NESDIS mission is to acquire, process, and analyze data, and to prepare products for distribution from these two satellite systems and from other operational research Earth-observing satellites. NOAA also conducts research and development including advanced system tradeoff and cost studies, efforts to improve methods of obtaining satellite data, and projects to develop new techniques for applying these data to warnings and predictions and to other atmospheric, oceanic, and land monitoring applications.

These satellites also collect data from buoys, ships, aircraft, and remote platforms and relay them to a central processing and distribution site. The polar satellites also provide a relay function for global emergency signals from aircraft and ships in distress under an International Space System for Search of Vessels in Distress/Search and Rescue Satellite Aided Tracking (COSPAS/SARSAT) program. A key element in the success of this program, in addition to the space hardware segment, is the ground processing segment for receiving, processing, and distributing alert notification and location data. Over 300,000 Emergency Locator Transmitters (ELT's) used by aircraft, and approximately 6,000 beacons in the U.S. recreational and fishing fleet are served by this program. Procurement of satellites is a cooperative venture in which NOAA and NASA have key roles. NOAA as the operating agency represents the user and defines the basic requirements for the system. NASA as the agency with multi-disciplinary engineering expertise develops detailed specifications and procures and launches the spacecraft. NASA is reimbursed for these services by NOAA.

Well in advance of the procurement NOAA initiates the preparation of budget estimates. The budget estimates are formulated to reflect the total cost of the satellite series, including contractor costs for satellite and instrument development and fabrication, NASA support, launch vehicles and launching services, program management, and any other associated costs. The phasing of the total cost is developed so as to project the yearly funding necessary to continue the program at a level required to maintain the delivery and launch schedule. Specification preparation, requests for proposals, and negotiations are completed based upon planning for contract award at the time when funding first becomes available. The delivery of the first satellite in any new procurement is expected approximately 5 years from the date of contract award. NOAA procures, operates, and maintains ground systems which command and control the satellites (with the exception of LANDSAT) and acquire data from them. The primary components of these ground systems are The SOCC (Satellite Operations Control Center) at Suitland, Maryland, and two CDAs (Control and Data Acquisition stations) at Wallops Island, Virginia, and Fairbanks, Alaska. In addition to day-to-day satellite control and monitoring, NOAA ground systems operations coordinate activities for anomaly assessment and quality control, provide launch and checkout services for new spacecraft, and provide tracking data and other acquisition information to outside users of the spacecraft data.

After acquiring, processing, and analyzing satellite data, NOAA prepares products for distribution. The primary uses for NESDIS products are the forecasts and warnings provided by the National Weather Service, but the satellite data is also used in many other environmental information contexts. These include analyzing climate change; detecting volcanic eruptions and wilderness fires and tracking associated dust clouds; and monitoring the health of vegetation, the growth of deserts, and deforestation. NOAA conducts research and development to improve data quality and to identify other ways in which the data can be used to protect life and property and strengthen the Nation's economy.

NOAA is the lead U.S. agency for the International COSPAS/SARSAT program, and operates the U.S. SARSAT Mission Control Center. In this program, transponders flown on NOAA and Soviet satellites receive signals from ships and aircraft in distress and identify their location.

POLAR ORBITING SYSTEM -- This program involves the procurement and launch of the polar-orbiting operational environmental satellites. NOAA 10, launched in September, 1986 and NOAA 11, launched in September, 1988 are the current operational satellites. Launches of subsequent spacecraft will be determined after careful analysis of in-orbit capabilities and life expectancy estimates. For planning purposes, the nominal operational life of a polar-orbiting satellite is 31 months on average; planning schedules must factor in the potential for launch failures and early-orbit spacecraft failures. All satellites through NOAA J will be launched on Atlas vehicles obtained from the Air Force, through NASA on a reimbursable basis. The NOAA KLM series of satellites is planned to be launched on Titan II launch vehicles, also procured by the Air Force through NASA.

The NOAA KLM series of polar-orbiting satellites will be three-axis stabilized satellites carrying the following instruments:

- TOVS - Tiros Operational Vertical Sounder; collects atmospheric temperature and water vapor profiles.

- AVHRR - Advanced Very High Resolution Radiometer; collects medium resolution (4 km) cloud images which are 1 continuously broadcast through the Automatic Picture Transmission (APT) system. It also provides high resolution (1 km) data with direct readout through the High Resolution Picture Transmission (HRPT) system.

- DCPLS - Data Collection and Platform Location System, called ARGOS, furnished by France.

- SEM - Space Environment Monitor; measures solar activity.

- SBUV - Solar Backscatter Ultra Violet ozone monitoring instrument; collects global ozone measurements.

- SAR - Search and Rescue Instrument; Canada provides the spacecraft beacon.

The contract for the NOAA KLM spacecraft was awarded in July, 1988. These spacecraft are being built to functional specifications similar to NOAA J, but with an improved sounding unit, the Advanced Microwave Sounding Unit (AMSU). The sounder on the satellites through NOAA J is comprised of three instruments: the High-Resolution Infrared Radiometric Sounder (HIRS); the Stratospheric Sounding Unit (SSU), which is provided by the United Kingdom; and the Microwave Sounding Unit (MSU). The combination of these three instruments is called the TIROS Operational Vertical Sounder (TOVS). The AMSU will replace both the SSU and the MSU on the TOVS and it will have a greatly improved microwave capability. A portion of the AMSU will be furnished by the United Kingdom.

Funds requested for FY 1991 will be used to cover the cost for continued fabrication of the NOAA KLM satellites and instruments and the integration, test, and launch preparation of NOAA I and J. The procurement process for instruments for a next generation polar-orbiting environmental satellite system following NOAA KLM will begin in FY 1991. Funding also is required to reimburse the Air Force for launch services related to the Atlas launches of NOAA I and J and for NOAA K-N Titan launch vehicle costs.

This program also includes the ground-based equipment necessary to command and control the polar-orbiting spacecraft and process the data acquired for the user community. New ground system components must be in place to support NOAA K.

The principal products derived from polar-orbiting satellite data are: (1) vertical temperature and moisture soundings, (2) sea surface temperature measurements, (3) global cloud cover images and mosaics, (4) crop assessment parameters for agriculture monitoring, (5) Search and Rescue, and (6) total ozone measurements.

GEOSTATIONARY SYSTEM - This program involves the procurement and launch of the geostationary operational environmental satellites (GOES). GOES 7 (GOES-East), launched in February, 1987, is the current operational satellite. Subsequent GOES satellites are to be launched on approximately a five-year replacement basis, because the design-life of the GOES spacecraft is five years. GOES I is planned to be launched in 1991 to replace GOES 6 which ceased operations in 1989. GOES J is planned to be launched in 1992, GOES K in 1996, GOES L in 1997, and GOES M in the year 2001.

GOES I-M will be launched on Atlas Centaur expendable launch vehicles under a commercial launch services contract. The launch services contract for the GOES I-M series was awarded in May 1988. The launch services contract is being renegotiated to reflect the five-year planned launch schedule.

The contract for the GOES I-K spacecraft was awarded in October 1985; an option for two additional spacecraft (GOES L and GOES M) was exercised in December 1985. GOES I-M is a new series of geostationary spacecraft representing a major development effort. This is the first time that NOAA, rather than NASA, has retained budget responsibility for such development. Whereas the previous spacecraft were spin-stabilized, GOES I-M will be three-axis stabilized. Instruments on GOES I-M will be able to view the Earth continuously, rather than "eyeing" a scene once with each revolution. In addition, GOES I-M will be able to provide soundings and images simultaneously; the current GOES can only provide either soundings or images at any given time.

The GOES I-M series will carry the following instruments:

- GOES sounder - provides measurements of atmospheric temperature and moisture.
- GOES imager - provides infrared and visible images of the full or specific segments of the Earth disc.
- SEM - Space Environment Monitor; provides measurements of solar radiation data.
- DCS - Data Collection System; collects and relays environmental data measured by a variety of remotely located observing platforms.

- Solar X-Ray Imager - DOD-funded instrument to be flown on GOES L.

Funds requested for FY 1991 will be used to continue development, test, and fabrication of the GOES I-M spacecraft and instruments, and for integration, test, and launch preparation of GOES I and J. The GOES I spacecraft has completed spacecraft level testing and the prototype imager has been delivered and is undergoing integration and performance tests. The sounder requires additional development effort to meet acceptable performance and reliability requirements. Funds are also requested for Atlas Centaur commercial launch services.

This program also includes the ground-based equipment needed to command and control the GOES spacecraft and process the data required for the user community. New ground system components will be required for GOES I-M as this series has a more complex design and advanced observing capabilities compared with GOES 7. The three-axis stabilized design also places greater demands on spacecraft command and control. During the period that both GOES 7 and GOES I are providing operational service, NOAA must operate and maintain both the current ground system and the new ground system established for the GOES I-M series. After GOES 7 completes its operational lifetime, the older ground system will be deactivated and the new ground system will support the GOES system through the end of this century.

ENVIRONMENTAL OBSERVING SERVICES - Under this program, NOAA operates and maintains satellite ground facilities, ingests and preprocesses incoming satellite data, provides satellite-derived products to the users, and conducts research to improve the use of the satellite data. Specific functions include:

- Operation and maintenance of ground facilities to command and control operational satellites, acquire satellite data, and transmit satellite data to the central processing and analysis center. These functions are carried out by the Satellite Operations Control Center (SOCC) at Suitland, Maryland, and the Command and Data Acquisition (CDA) stations at Wallops Island, Virginia, and Fairbanks, Alaska.

- Ingestion and processing of all data from the polar and geostationary spacecraft, including vertical atmospheric measurements (soundings), low-level wind vectors, and sea surface temperatures for input to National Weather Service analyses and forecast models. Image production for distribution to users and a digital satellite data archive.

- Provide products to assist in protection of life and property such as quantitative precipitation estimates for flash flood situations, hurricane classification, satellite monitoring and tracking of severe weather, and sea ice and ocean front analyses.

- Provide research to develop new and improved methods of obtaining satellite data and to develop techniques for applying these data to atmospheric, oceanic, and land monitoring, warning, and prediction.

The principal products derived from geostationary satellites are: (1) full disc and sectorized cloud-cover images, (2) derived wind speed and direction, (3) assessments of hurricane motion and intensity, (4) severe thunderstorm and tornado detection and monitoring, and (5) warnings of potential flash flooding. Snow cover and sea and lake ice maps, and products to support agriculture are produced from data derived from both environmental satellite systems. The geostationary satellites also provide measurements of vertical temperature and moisture.

The application products derived from both polar and geostationary satellites are delivered through a variety of formats: user-accessible data bases; photo facsimile images; satellite weather facsimile transmission (WEFAX); interactive computer access, and archives. Techniques also are developed for new and improved applications of satellite data. In the future, satellite data will also be transmitted over the NOAA-Port system to National Weather Service field offices and other users. Stratospheric sounding data derived from instruments developed and funded by the United Kingdom are relayed to the United Kingdom; Data Collection System (DCS) data, derived from the French-funded ARGOS systems on the spacecraft, are relayed to Project ARGOS in France as part of bilateral agreements. United States users, in turn, receive processed data from the French and British.

Analyses and interpretation of geostationary and polar-orbiting satellite data are prepared by the National Weather Service at forecast offices staffed with satellite meteorology experts. These offices receive high-resolution images on a 24 hour-per-day, 365 day-per-year basis from the GOES Central Data Distribution System. One station, San Francisco, receives the high-resolution polar satellite data directly from the spacecraft. All of these offices analyze and interpret the cloud and earth surface images and associated products for use in their regional forecasts. These images are used in preparing aviation forecasts, and short-term forecasts and warnings of hazardous events such as severe local storms and tornadoes, hurricane advisories, and gale warnings. The products also are used in preparing river and flood forecasts, snow melt and sea ice analyses, and marine forecasts and warnings, including services for shipping, coastal and ocean fisheries, and recreational boating. GOES imagery is distributed to television stations, universities, state governments, industry, and other Federal agencies through the GOES-TAP system which allows the user to receive any of the standard image sectors available to a particular forecast office for a fee. In the future, the NOAA-Port system will be the primary means of delivering GOES data and products.

NOAA conducts research to improve our understanding of the physical processes in the atmosphere, on land, and in the oceans which affect weather and climate. Satellites are integral to this work because of their unique capability to provide the vast amounts of data needed for forecast modeling. The satellite's vantage point in space provides data coverage in both time and areal extent not achievable by other practical observational techniques or systems. Universities and industrial groups participate in developmental activities through cooperative research and information exchange arrangements. Also, close coordination is maintained with related NASA and DOD research and development programs and with the environmental satellite programs of other nations.

LANDSAT - This program continues the development of the next satellite, Landsat 6, scheduled for launch in mid-1991. This satellite will be operated by a private sector corporation, replacing the current satellites, Landsats 4 and 5. Landsat applications include agricultural crop assessment, pollution appraisal, population growth monitoring, and geological analysis related to petroleum and mineral extraction. Landsats 4 and 5 carry a Thematic Mapper and Multi-Spectral Scanner. Landsat 6 will carry an enhanced Thematic Mapper. The Landsat 6 satellite will be launched on a Titan II launch vehicle by the Air Force under a cost reimbursement agreement.

Summary of Workload and Performance Data

Polar orbiting systems and geostationary systems

Performance is measured by adherence to following launch schedules:

PLANNING LAUNCH SCHEDULE - POLAR SYSTEM

NOAA-D	CY 1990
NOAA-I	CY 1991
NOAA-J	CY 1992
NOAA-K	CY 1993
NOAA-L	CY 1995
NOAA-M	CY 1996

PLANNING LAUNCH SCHEDULE - GEOSTATIONARY SYSTEM*

GOES-I	CY 1991
GOES-J	CY 1992
GOES-K	CY 1996
GOES-L	CY 1997
GOES-M	CY 2001

* The current Commercial Launch Services contract contains earlier launch dates. It is being renegotiated to reflect these new launch dates corresponding to the plan to schedule replacement launches to replace launches (GOES East and GOES West) every five years.

Environmental observing services - During periods of normal operations production is considered successful if we achieve 90 percent of each scheduled event. Effectiveness of satellite operations is measured by the following percentages of accomplishment:

	FISCAL YEAR (%)			
Polar-orbiting satellites:	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Satellite soundings	93	92	92	92
Sea surface temperatures	98	92	92	92
Mapped images	98	95	95	95
Facsimile images	98	95	95	95
Data transmissions	98	95	95	95
Geostationary satellites:				
Computer-derived winds	98	95	95	95
Weatherfacsimile transmissions	98	95	95	95
Facsimile	98	95	95	95

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Polar-Orbiting System....................................	Pos./BA	0	$15,112	0	$64,584	0	+$49,472
	FTE/Obl.	0		0			

This change includes two items:

Polar Spacecraft and Launching (+$49,472,000) - The FY 1991 NOAA budget reflects an increase of $49,472,000 (object class 25.0) over the amount included in the FY 1990 Appropriation. The FY 1991 request includes funds to meet the annual costs to continue fabrication, integration, and test of NOAA I and J spacecraft and fabrication of NOAA KLM spacecraft and instruments. The FY 1991 spacecraft increase reflects normal year-to-year fluctuations in the accrued cost of multi-year spacecraft procurements. Funds are also requested to meet the annual costs of reimbursing the Air Force for Atlas and Titan launch services. Year-to year variances in launch costs reflect USAF payment schedules based on launch-related activities planned for each year. The total estimate for NOAA I and J launches is increased to include the most recent USAF estimates of the NOAA cost-share for Atlas launch facilities. The total estimate for NOAA KLM launch costs is reduced to reflect updated USAF Titan launch cost estimates. Funds are also requested in FY 1991 to begin procurement of common interface instruments for the polar-orbiting environmental satellite system that will follow NOAA KLM.

The following table identifies future increments for the proposed program:

(Dollars in thousands)

	FY 1988 and Prior	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	To Complete	Total
NOAA A-G									
Spacecraft	$137,674								$137,674
Launching	79,871								79,871
Subtotal	217,545								217,545
NOAA H-J									
Spacecraft	181,992	5,381	6,400	4,100	2,800				200,673
Launching	35,391	2,552	20,943	37,947					96,833
Subtotal	217,383	7,933	27,343	42,047	2,800				297,506
NOAA K-M									
Spacecraft	159,409	1,917	22,956	57,988	46,112	41,493	43,306	11,849	385,030
Launching	12,875	1,000	10,785	24,000	30,000	16,700	4,600	8,831	108,791
Subtotal	172,284	2,917	33,741	81,988	76,112	58,193	47,906	20,680	493,821
Follow-on System	0	0	3,500	30,000	133,650	164,025	0	395,250	726,425
Ground Systems	41,182	4,334	0	2,000	2,000	5,000	5,000	13,000	72,516
Total Requirements	$648,394	$15,184	$64,584	$156,035	$214,562	$227,218	$52,906	$428,930	$1,807,813

Changes for FY 1991

(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec.(-)	
Geostationary System	Pos./BA	0	$135,348	0	$109,146	0	-26,202
	FTE/Obl.	0		0		0	

This change includes two items:

Geostationary Spacecraft and Launching (-$26,202,000) - A decrease of $26,202,000 (object class 25.0) is requested. This is comprised of a decrease for spacecraft procurement and an increase will be for launch services. Funding requirements for both spacecraft and launch services are subject to change due to a rephasing of the program by the spacecraft contractor, which is currently underway. The spacecraft contract has experienced significant cost growth due to technical problems experienced in the development of operational sensors; this is attribuiable to the developmental nature of this new spacecraft system. Some specifications have been relaxed through a descoping exercise conducted last year to limit cost growth. The descoped system will still meet the needs of the National Weather Service through the 1990's. To further limit cost growth, the contract is being renegotiated from a cost-reimbursable to a fixed-price type contract. The GOES I-M launch services contract is also being renegotiated to produce total GOES system savings by limiting replacement launches to five-year centers, commensurate with the five-year design life of the GOES I-M spacecraft. The GOES I-M spacecraft will be launched on Atlas Centaur expendable launch vehicles.

The following table identifies future increments for the proposed program (dollar amounts in thousands):

	FY 1989 and Prior	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	To Complete	Total
GOES I-M									
Spacecraft	$463,007	$97,642	$66,126	$46,842	$17,400	$10,675	$21,885	$25,020	$748,597
Launching	73,683	35,255	41,345	23,100	23,100	54,300	31,400	222,900	505,083
Subtotal	536,690	132,897	107,471	69,942	40,500	64,975	53,285	247,920	1,253,680
Ground Systems	49,164	3,100	1,675	1,400	1,400	0	0	0	56,739
Total Requirements	$585,854	$135,997	$109,146	$71,342	$41,900	$64,975	$53,285	$247,920	$1,310,419

* Estimates subject to change following contract renegotiation.

Changes for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc. (+) or Dec. (-)	
Landsat Commercialization	Pos./BA	0	$34,734	0	$36,334	0	+1,600
	FTE/Obl.	0		0		0	

Landsat Commercialization (+$1,600,000) -- An increase of $1,600,000 (object class 25.0) is requested for FY 1991. The funds are required to reimburse the Air Force for the Titan II launch of Landsat 6, planned for mid-1991. The Landsat 6 satellite and ground system will be operated by the private sector, contractor, EOSAT, as called for by the Landsat Commercialization program that was initiated in FY 1985. Landsat 6 uses an Advanced TIROS-N design and will carry an Enhanced Thematic Mapper.

The Administration is considering options for continuing Landsat-type data after Landsat-6. No funds are required in 1991 for additional satellites consistent with the expected lifetime of Landsat-6. The National Space Council will conduct a review of the management and configuration of a follow-on system. The Administration will report to Congress on the outcome of their study expeditiously.

The following table identifies funding increments for the Landsat 6 program:

	FY 86 & Prior	FY 87	FY 88	FY 89	FY 90	FY 91
Spacecraft	$90,000	$62,500	$10,000	$20,400	$34,900	0
Launching	0	0	0	0	0	$36,334
Total	$90,000	$62,500	$10,000	$20,400	$34,900	$36,334

		1991 Base		1991 Estimate		Inc. (+) or Dec.(-)	
Environmental Observing Services	Pos./BA	478	$57,692	478	$48,192	0	-$9,500
	FTE/Obl.	459		459		0	

Environmental Observing Services (-$9,500,000) -- A decrease of $9,500,000 is requested for Landsat Operations. No resources are requested for Landsat 4 and 5 operations in FY 1991 because the satellites are expected to cease operating in 1990. However, the Administration is committed to operating the Landsat 4 and 5 satellites as long as they function. No funds are proposed for operation of Landsat 6 because these costs will be covered by the contractor, EOSAT. Landsat 4 is currently used only to collect Multi-Spectral Scanner (MSS) data, due to a transmitter and power supply failure in FY 1983. Funds for the continued operation of Landsats 4 and 5 for the last six months of 1990 will be provided to NOAA from the major user agencies (Departments of Defense, Agriculture, and Interior).

Department of Commerce
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		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Environmental Satellite, Data, and Information Service:											
Environmental Data Management Systems:											
Data and Information Services..	Pos./BA	372	21,220	372	21,536	372	22,174	372	22,174	0	0
	FTE/Obl.	325	21,220	325	21,536	325		325		0	
Total	Pos./BA	372	21,220	372	21,536	372	22,174	372	22,174	0	0
	FTE/Obl.	325	21,220	325	21,536	325		325		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
National Environmental Satellite, Data, and Information Service:											
Environmental Data Management Systems Data and Information Services..	FTE/obl.	33	6,074	33	5,358	33	5,358	33	5,305	0	(53)
Reimbursable obligations	FTE/obl.	33	6,074	33	5,358	33	5,358	33	5,305	0	(53)

Justification of Program and Performance

Activity: National Environmental Satellite, Data, and Information Services
Subactivity: Environmental Data Management System

Goals and Objectives

Goals: To provide worldwide environmental data and information products and services in the atmospheric, marine, solid earth, and solar-terrestrial sciences to meet the needs of users in commerce, industry, agriculture, science and engineering, the general public, and Federal, state and local agencies. These products and services are used in decisions critical to the following: national economy; national defense; the productivity of American industry; energy development and distribution; world food supplies; public health; safety and welfare and, the development of natural resources.

Objectives: To increase productivity and improve support to the national economy, food and energy industries, scientific research, and the military services by improving the quality and accessibility of national environmental data and information files; and to improve environmental data products and services.

Base Program

The Environmental Data Management System subactivity comprises the national environmental data base and NOAA's three data centers: the National Climatic Data Center (NCDC) in Asheville, N.C.; the National Oceanographic Data Center (NODC) in Washington, D.C.; and, the National Geophysical Data Center (NGDC) in Boulder, Colorado. This subactivity also includes the NOAA library system. The library system, managed by NODC, includes a central library in Rockville, Maryland and branches in Seattle, Washington and Miami, Florida.

NOAA collects global environmental data about the oceans, earth, atmosphere, and the sun for use in NOAA activities to investigate, describe, and predict environmental conditions. Other domestic and foreign agencies, organizations, and individuals also collect data for their own environmental activities. After the data have been used for short-term purposes, selected data from these sources are obtained by NOAA, processed, and archived in the national environmental data base at the NOAA data centers. The data are used in numerous applications in industry, agriculture, business, law, science, engineering, and academic research, as well as by Federal, state, and local government agencies and by the general public. Applications include assessment of the impact of environmental fluctuations on industrial productivity and the national economy, national defense, energy development and usage, global food supplies, natural resources, natural hazards, and human health. Maintaining a national environmental data base ensures that the large investment made to collect global data continues to pay off by providing information for decision-making in climate sensitive industries, policy planning, education, and science.

CLIMATE DATA SERVICES: The National Climatic Data Center (NCDC) is located in Asheville, North Carolina, with a Satellite Data Services Division (SDSD) in Camp Springs, Maryland. NCDC was established as the official weather records center by authority delegated by the National Archives and Records Service. The NCDC provides full data management functions, as it annually receives, processes, and archives over 30 million conventional meteorological observations. SDSD archives approximately 2.5 thousand gigabytes of digital data and 60 thousand photographic images a year. These observations include surface, marine, upper air, radar, and solar radiation data, obtained from the National Weather Service, the Federal Aviation Administration, NOAA satellites, the Department of Defense, and other national and international sources. These data are maintained in a variety of media including digital, analog, microform, photographic imagery, and manuscript forms.

These data, some collected continually for over 100 years, give clues to climate variability and trends. NCDC is working with the World Meteorological Organization, the World Data Center System, and with individual countries in order to gain access to climatic data from around the world. Data are flowing into the Center in greater volumes as concern for climate and global change increases.

NCDC provides data and information products to a large and diverse user community, including climate researchers, engineers, agribusiness, planners, attorneys, government agencies, and the general public. For the research community, NCDC provides a variety of definitive ground-truth data sets. These baseline data sets establish the long-term climate perspective needed to verify Global Climate Models (GCM's) and other research studies. To meet the needs of a broad range of users, NCDC publishes several general monthly publications. Each year more than one million copies are distributed to paying subscribers. NCDC also provides data and information designed to meet specific needs requested by its users.

In addition to responding to user requests (answering an estimated 80 thousand user requests during 1989), NCDC prepares climate information summaries to improve public health and safety, improve productivity, and to generally improve the U.S. competitive edge through informed decision-making. Economic sectors benefiting from NCDC's data include energy development, energy conservation, power production, food production, human health, construction design and scheduling, and airport sitting. NCDC also performs climatic applications studies for other government agencies including NASA, EPA, DOD, and DOE.

User services at NCDC are supported by user fees. Prices are established and approved each year. In FY 1989, the approximately 35 thousand orders resulted in reimbursable income of approximately $4.5 million.

OCEAN DATA SERVICES: The National Oceanographic Data Center (NODC) in Washington, D.C. maintains the world's largest unclassified oceanographic data base. Holdings include records from more than 900,000 stations containing temperature, salinity, and in many cases nutrient chemistry data from the total water column (sea surface to ocean floor); 50.1 million surface and subsurface current measurements; 2 million bathythermograph records; and over 34.5 million records from automated ocean buoys. Data holdings also contain more than 4.7 million records from special projects such as the Outer Continental Shelf Environmental Assessment Program (OCSEAP).

Many of these data are obtained through international exchange agreements. NODC operates World Data Center A, Oceanography, under which data exchange agreements are in effect with more than forty countries engaged in marine research. NODC is also responsible for activities required by Section 8 of the National Ocean Pollution Planning Act involving tracking and referral for ongoing U.S. marine pollution research efforts.

NODC also oversees development, coordination, and operation of the NOAA library and information system. The NOAA library network, comprising more than one million volumes, is responsible for providing up-to date scientific, technical, and legislative information services to all NOAA scientists, administrators, and managers. The library uses a wide array of products and services to provide user support, including on-line access to hundreds of data bases, inter-library loan arrangements, and DC-ROM technology for citation searches.

Users of NODC services include industry, such as maritime shipping and offshore drilling companies; oceanographic and atmospheric scientists working on global change programs such as Tropical Ocean Global Atmosphere (TOGA), World Ocean Circulation Experiment (WOCE), and Global Ocean Flux Study (GOFS); commercial research organizations; Federal government agencies such as NASA, USGS, and NOAA working jointly on global change studies; state and local government agencies working with NOAA on coastal ocean research problems; and the general public.

Data are provided to users on either an exchange or a reimbursable basis. Under exchange agreements data may be provided at no cost in exchange for data of comparable value for inclusion in the national data base. In all other cases, data are provided to the users on a cost-recovery basis which reflects the actual cost to the government of providing the data.

GEOPHYSICAL DATA SERVICES: The National Geophysical Data Center (NGDC) in Boulder, Colorado, compiles, archives, and disseminates a wide variety of scientific data related to the earth's interior; the land surface and ocean floor; snow cover and ice extent; the upper atmosphere; the space environment; and solar activity. Disciplines covered include seismology, studies of the earth's gravity and magnetic fields, geochemistry, marine geology and geophysics, glaciology, paleoclimatology, upper atmospheric physics, and space and solar physics. Data are acquired through formal and informal arrangements with other government agencies, universities, and many foreign sources. NGDC operates the World Data Center a discipline center for Solar-Terrestrial Physics, Solid Earth Geophysics, Marine Geology and Geophysics, and Glaciology (Ice and Snow).

Data holdings consist of several hundred data bases of various sizes. Holdings include over 50 million ionograms; over 2.5 million magnetograms; marine geophysical data collected over 10 million miles of ship tracks by research vessels; aeromagnetic data collected over 12 million flight miles; over one million film mosaics from the Defense Meteorological Satellite Program, and many others. Selected data are routinely exchanged with World Data Centers B in the USSR, C in Europe and Japan, and D in China.

NGDC publishes the monthly periodical "Solar Geophysical Data", which provides detailed information on solar activity and its effect on earth to the worldwide research community. It publishes a wide variety of special reports, summaries, listings, and announcements of new data acquisitions. It provides various customized services to meet specific user needs in both the research community and the private sector.

Over ten thousand user requests are received each year. Users range from scientists and engineers in the research community and the private sector, to Federal, state, and local government agencies and the general public. Particular emphasis is placed on providing data to the earth science research community to support research in global change, resource exploration, and basic science.

Summary of Workload and Performance Data

(user requests serviced)

	1989 Actual	1990 Estimate	1991 Estimate
Climate data services	110,000	110,000	110,000
Ocean data services	6,706	7,500	8,000
Geophysical data services	10,000	10,500	11,000
Library and information services	38,532	40,800	43,300

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		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Administration and Services:											
Executive Direction and Administration................	Pos./BA	375	23,818	375	24,247	375	25,006	375	25,006	0	0
	FTE/Obl.	384	24,009	384	24,583	384		384		0	
Central Administrative Support.....	Pos./BA	842	34,100	842	34,956	842	36,992	842	37,192	0	200
	FTE/Obl.	928	33,706	928	35,731	928		928		0	
Retired Pay Commissioned Officers..	Pos./BA	0	5,277	0	5,277	0	5,277	0	5,277	0	0
	FTE/Obl.	0	5,277	0	5,277	0		0		0	
Total	Pos./BA	1,217	63,195	1,217	64,480	1,217	67,275	1,217	67,475	0	200
	FTE/Obl.	1,312	62,992	1,312	65,591	1,312		1,312		0	

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		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Administration and Services											
Executive Direction and Administration...........	FTE/obl.	15	111	15	390	15	390	15	421	0	31
Central Administrative Support......................	FTE/obl.	21	13,565	21	13,237	21	13,237	21	12,724	0	(513)
Reimbursable obligations	FTE/obl.	36	13,676	36	13,627	36	13,627	36	13,145	0	(482)

Justification of Program and Performance

Activity: Program Support
Subactivity: Administration and Services

Goals and Objectives

Goals: Administer programmatic and administrative policies of the President; establish NOAA operational policies; provide program support and direction; provide cost-effective administrative support services to NOAA and to DOC field components; conduct budget formulation, preparation, and execution; and, provide retirement benefits to NOAA commissioned officers and their families.

Objectives: To provide for overall NOAA management, including administration of the NOAA Corps, the administrative support centers, program support, automated systems, and retired pay for commissioned officers.

Base Program

In FY 1991 the following activities will be undertaken:

- Executive Direction: Administers programmatic and administrative policies of the President.
- Central Administrative Support: Includes NOAA's overall management of personnel, procurement, payments and administrative services, and NOAA's share of resources required to operate the five Administrative Support Centers (ASCs). ASCs provide the following services:
  - Personnel - all personnel functions, including classification and hiring, maintenance of personnel files, position reviews, labor management relations, employee counseling, and separation and retirement processing.
  - Procurement - including processing of all contracts, purchase orders, grants and cooperative agreements, and associated procurement functions.
  - Facilities and Logistics - including real property management and space utilization, oversight of personal property, transportation of goods, telecommunications, printing, etc.
  - Finance - processing of administrative payments through the NOAA and Department-wide administrative payments systems.
- Retired Pay Commissioned Officers: NOAA will continue to provide retirement pay for NOAA commissioned officers and payments to survivors of retired officers (approximately 144 retired officers and 53 survivors).

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Employees serviced	16,000	24,000*	16,000
Procurement and grant actions processed	30,000	30,000	30,000
Controlled correspondence received and processed	3,000	3,400	3,400

* Includes employees hired for development of the decennial census.

Increases for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Central Administrative Support	Pos./BA	842	$36,992	842	$37,192	0	+$200
	FTE/Obl.	928		928		0	

Major Projects Procurement Support (+$200,000) - An increase of $200,000 (object class 25.0, funds paid to Working Capital Fund) is requested to provide the procurement support necessary for major National Weather Service and National Environmental Satellite, Data, and Information Service projects. The funding will be used to supplement existing NOAA resources to operate a Department-wide office for major procurements. Existing procurement resources within NOAA are insufficient to properly coordinate, integrate, and control procurements on a major project level. Currently, staff with requisite expertise leave DOC for positions at higher grades at other agencies. The Departmental major procurement office will be competitive with similar operations in other agencies, notably, the Department of Defense, which provide a high grade structure for their contractual staff. The centralization of this major procurement support adds the benefits of providing central integrated procurements and of structuring workload within the context of major projects as requirements fluctuate during project life cycles.

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(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Facilities:											
Facilities Maintenance..............	Pos./BA	0	471	0	2,671	0	2,454	1	3,204	1	750
	FTE/Obl.	0	381	0	2,761	0		1		1	
Facilities Consolidation............	Pos./BA	0	0	0	750	0	750	0	3,473	0	2,723
	FTE/Obl.	0	700	0	1,055	0		0		0	
Total	Pos./BA	0	471	0	3,421	0	3,204	1	6,677	1	3,473
	FTE/Obl.	0	1,081	0	3,816	0		1		1	

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(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Facilities Maintenance....................	FTE/obl.	0	1,002	0	0	0	0	0	0	0	0
	FTE/obl.	0	1,002	0	0	0	0	0	0	0	0

Justification of Program and Performance

Activity: Program Support
Subactivity: Facilities

Goals and Objectives

Goals: Provide for repairs and maintenance on major research and operational facilities and provide for consolidation of selected NOAA Washington Metropolitan area facilities at the Metro Center Complex Buildings 1 and 2 in Silver Spring, MD.

Objectives: To provide for repairs and maintenance on major NOAA-owned research and operational facilities, and to consolidate area employees. The fund for repairs and maintenance addresses major health and safety issues for agency-wide operations and contributes to improved operational effectiveness. A routine maintenance fund allows timely correction of high priority deficiencies and rational planning to address future maintenance and repair problems. The Department of Commerce initiated the consolidation of NOAA's metropolitan area facilities at the Metro Center Complex in Silver Spring, MD., during 1988, in an effort to enhance program integration and management efficiency.

Base Program

Facilities Maintenance: The maintenance program was established in FY 1987 to initiate needed repairs on major research and operational facilities primarily for NOAA's fisheries laboratories and field stations.

Facilities Consolidation: The consolidation project includes the costs being incurred by NOAA to occupy two buildings at the Silver Spring Metro Center.

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Facilities Maintenance..	Pos./BA	0	$2,454	1	$3,204	1	+$750
	FTE/Obl.	0		1		1	

Maintenance of NOAA Facilities (1 position, +$2,750,000) - An increase of 1 position and $2,750,000 is requested to undertake a continuing NOAA-wide program to maintain and repair NOAA owned facilities. The following criteria have been established to rank the critical maintenance and repair needs across all NOAA programs:

- Abatement of imminent safety hazards;

- Alterations to facilities mandated by statute to abate long- and short-term pollution or other hazards;

- Repairs to facilities to enable NOAA missions to continue without interruptions.

NOAA operates approximately 228 installations nationwide and is responsible for the maintenance/repair/alteration of these facilities. A preliminary study conducted by the engineering and facilities management staffs of the Administrative Support Centers identified over 50 non-recurring maintenance projects requiring a total of $30 million to complete. At these installations, there are approximately 250 fuel tanks, many underground, which must be brought into compliance with EPA regulations. Some need to be replaced while many more require modifications including installation of leak detection systems. Projects also include the replacement of roofs, removal of asbestos, and replacement of deteriorated HVAC (heating, ventilating and air conditioning) systems. Normal facility maintenance does not include these major repairs and renovations. This increase would initiate an ongoing program to address these major projects as they are identified. The requested position would be filled by an engineer to oversee all phases of these projects including planning and construction.

Woods Hole Fisheries Lab - Bulkhead and Dock (-$2,000,000) - A decrease of $2,000,000 (object class 25.0) is requested to reflect the one-time funding in FY 1990 to undertake needed repairs at the Woods Hole facility.

Increases for FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec.(-)	
Facilities Consolidation	Pos./BA	0	$750	0	$3,473	0	+$2,723
	FTE/Obl.	0		0		0	

Facilities Consolidation (+$2,723,000) - An increase of $2,723,000 is requested to cover the costs associated with NOAA's consolidation of employees in Buildings 1 and 2 at the Metro Center Complex in Silver Spring, MD. NOAA began its consolidation of employees at the Metro Center Complex in FY 1988. NOAA will fully occupy Buildings 1 and 2 in FY 1990. The funds requested in FY 1991 will cover the costs for leasing and the purchase of furnishings for those buildings and will complete the repayment of the FY 1989 GSA loan ($750,000 in FY 1991). The consolidation will allow NOAA to achieve the GSA space utilization standard in modern, high quality Federal work space designed to satisfy NOAA's needs. This will be largely accomplished by the use of systems furniture.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Facilities
Program Change: Maintenance of NOAA Facilities

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	39
11.9	Total personnel compensation	39
12.1	Civilian personnel benefits	9
21	Travel and transportation of persons	4
24	Printing and reproduction	2
25	Other services	148
32	Lands and structures	2,548
99	Direct obligations	2,750

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Program Support
Subactivity: Facilities
Program Change: Maintenance of NOAA Facilities

Title:		Grade	Number	Annual Salary	Total Salaries
Engineer		14	1.00	52,104	52,104
Total			1.00		52,104
Less lapse	25.00%		0.25		13,026
Total full-time permanent			0.75		39,078

Personnel Data		
Full-Time Equivalent Employment:		
Full-time permanent	0.75	
Other than full-time permanent		
Total	0.75	
Authorized Positions:		
Full-time permanent		1.00
Other than full-time permanent		
Total		1.00

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Facilities
Program Change: Facilities Consolidation

Object Class		1991 Increase/ (Decrease)
23.3	Communications, utilities and miscellaneous charges	2,100
31	Equipment	623
99	Direct obligations	2,723

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Marine Services:											
Marine Services....................	Pos./BA	750	57,625	750	59,240	750	60,120	772	65,848	22	5,728
	FTE/Obl.	804	56,827	804	60,038	804		823		19	
Total	Pos./BA	750	57,625	750	59,240	750	60,120	772	65,848	22	5,728
	FTE/Obl.	804	56,827	804	60,038	804		823		19	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Marine Services											
Marine Services................	FTE/obl.	28	581	28	159	28	159	28	115	0	(44)
Reimbursable obligations	FTE/obl.	28	581	28	159	28	159	28	115	0	(44)

Justification of Program and Performance

Activity: Program Support
Subactivity: Marine Services

Goals and Objectives

Goals: To provide safe vessels capable of obtaining data on the chemical, physical, biological, and geological characteristics and behavior of the oceans, the seafloor, the Great Lakes, and the ocean-atmosphere interface. This subactivity operates ocean and coastal vessels for use by NOAA, other Federal agencies and academic institutions. These organizations use the ships for programs which support marine navigation, marine resource development, business and economic activity, protection of life and property, and increased scientific knowledge concerning global climate changes, sea-level rise, coastal ocean matters and other evolving environmental phenomena.

Objectives: (1) Ensure the operational readiness and enhanced capabilities of the NOAA Fleet to support NOAA programs and their at-sea requirements; (2) provide centralized management and coordination, scheduling, repair, maintenance, port services, labor relations, operations procedures, and engineering for a fleet of 23 ships; (3) provide fuel, operating supplies, personnel, laboratory and deck equipment, sensor packages, communications, and navigation equipment to meet user requirements and schedules; (4) develop annual ship operating schedules based on program requirements; (5) develop annual and long-term plans for ship construction, rehabilitation, and maintenance to ensure optimum long-term use and readiness; (6) design, develop, and engineer ship systems to ensure cost-effective operation, and to meet user requirements and safety/legal regulations; and (7) train and qualify NOAA personnel for diving to ensure safe and effective diving operations.

Base Program

The NOAA Fleet is composed of 23 major vessels including the ALBATROSS IV and the JOHN N. COBB which are to be sold or disposed of in the near future. These NOAA vessels, ranging in length from 86 to 303 feet, conduct operations that support NOAA's programs in nautical charting, bathymetric mapping, fisheries research, resource assessment, marine environmental baseline assessment, coastal ocean circulation, and oceanographic and atmospheric research. Six ships are currently in an inactive status, including the ALBATROSS IV and the JOHN N. COBB. Operation of the remaining 17 vessels provides a total of 3,365 days-at-sea to support NOAA's highest priority programs. Changing program needs may necessitate changing sea day assignments and the mix of active and inactive vessels.

The programs supported include:

Subtropical Atlantic Climate Studies (STACS) - investigates the oceanic transport of heat, which is a key element in the natural global processes affecting long-term climate changes;

Fisheries Resource Assessment - investigates living marine resource stock size, condition, and distribution to support the fishery management functions of the Regional Fisheries Management Councils;

Porpoise Surveys - monitors the condition of porpoise stocks taken incidentally during U.S. purse seine tuna fishery operations;

Fisheries Oceanographic Cooperative Investigation (FOCI) - investigates the physical, chemical, and biological parameters affecting important fish stocks to determine how these parameters affect spawning, growth, survival, and recruitment;

Equatorial Pacific Ocean Climate Study (EPOCS) - investigates the role of the ocean in global climate through research on the dominant mechanisms that produce variations in sea surface temperature;

Tropical Oceans/Global Atmosphere (TOGA) - investigates the influence of large-scale atmospheric and oceanic changes in tropical ocean basins on short-term variability of global climate;

Radiatively Important Trace Species (RITS) - investigates certain atmospheric trace gases (such as chloroflourocarbons and nitrous oxides) to determine their chemistry and their potential to alter the global climate;

Sea Ice - research on sea ice processes to improve ice forecasting in Alaskan waters;

Outer Continental Shelf Environmental Assessment Program (OCSEAP) - investigates marine ecosystems to provide forecast capability for environmental damage caused by pollution;

Exclusive Economic Zone Mapping (EEZ) - maps and collects environmental data on the 200-mile Exclusive Economic Zone to enhance its development and protection;

Nautical Charting - hydrographic surveys in the Nation's coastal waters and ports to acquire data to update and maintain nautical charts and bathymetric maps;
National Status and Trends (NS&T) - investigates and monitors the long-term effects of human activities on the quality of the coastal ocean and estuarine environments;

World Ocean Circulation Experiment - studies the general circulation of the global ocean in order to predict ocean response and feedback to long-term changes in the atmosphere.

Ship characteristics and home port are tabulated below:

Ship	AGE	Length-Class	Mission(*)	Home Port	Status
OCEANOGRAPHER	26	303 ft. - I	1	Seattle, Washington	Inactive
DISCOVERER	26	303 ft. - I	1,4	Seattle, Washington	Active
SURVEYOR	30	292 ft. - I	1,4	Seattle, Washington	Active
MALCOLM BALDRIGE	20	278 ft. - I	1	Miami, Florida	Active
MT. MITCHELL	23	231 ft. - II	1,4	Norfolk, Virginia	Active
RAINIER	22	231 ft. - II	3	Seattle, Washington	Active
FAIRWEATHER	22	231 ft. - II	3	Seattle, Washington	Inactive
MILLER FREEMAN	22	215 ft. - II	1,2,5	Seattle, Washington	Active
ALBATROSS IV**	28	187 ft. - III	2	Woods Hole, Massachusetts	Inactive
DAVIDSON	23	175 ft. - III	4	Seattle, Washington	Inactive
McARTHUR	24	175 ft. - III	2,5	Seattle, Washington	Active
OREGON II	23	170 ft. - III	2	Pascagoula, Mississippi	Active
WHITING	27	163 ft. - III	3,4	Norfolk, Virginia	Active
PEIRCE	27	163 ft. - III	3,5	Norfolk, Virginia	Inactive
DAVID STARR JORDAN	25	171 ft. - IV	2	San Diego, California	Active
TOWNSEND CROMWELL	27	164 ft. - IV	2	Honolulu, Hawaii	Active
DELAWARE II	22	156 ft. - IV	2	Woods Hole, Massachusetts	Active
FERREL	22	133 ft. - IV	5	Norfolk, Virginia	Active
CHAPMAN	10	127 ft. - IV	2	Pascagoula, Mississippi	Active
JOHN N. COBB**	41	94 ft. - V	2	Seattle, Washington	Inactive
RUDE	24	90 ft. - V	3	Norfolk, Virginia	Active
HECK	24	90 ft. - V	3	Norfolk, Virginia	Active
MURRE II	47	86 ft. - VI	2	Juneau, Alaska	Active

* 1 = Oceanographic Research; 2 = Fisheries Research; 3 = Hydrographic Surveys; 4 = Bathymetric Mapping; 5 = Environmental Assessment

** To be sold or disposed

These ships are staffed by NOAA Corps Commissioned Officers, Wage Marine Employees, and General Schedule Technicians. They are deployed for multiprogram or specialized use depending on size, range, laboratory space, equipment, and accommodations. The Class I and II ships have the necessary size, endurance, and equipment to conduct surveys and investigations in the deep ocean outward from the continental shelf or in remote areas such as Alaska and Antarctica. The smaller Class III, IV, V, and VI are designed for continental shelf and near-shore operation.

The Atlantic Marine Center (AMC) in Norfolk, Virginia, provides regional fleet management, maintenance, stores, supplies, repair facilities, data processing facilities, operational support, and administrative support for the 11 East Coast ships. The Pacific Marine Center (PMC) in Seattle, Washington, provides similar services for the 12 West Coast ships.

Headquarters in Rockville, Maryland, provides centralized management; coordinates the development of annual ship operating schedules; updates long-range plans for new ship construction, inspection, rehabilitation, repair, maintenance, and operations; manages marine personnel labor relations (maritime unions); updates standard fleet procedures; carries out inspections; completes engineering for ship systems upgrade; procures equipment and systems; provides diver training and certification; monitors NOAA diving activities for adherence to regulations and diver safety and efficiency; and develops equipment and procedures for diving in waters containing hazardous materials.

The ships of the NOAA fleet and the onboard equipment represent a large capital investment. A continuing level of adequate maintenance is needed to protect this investment and ensure the readiness, reliability, and effectiveness of the fleet and thus NOAA's capability to meet commitments in carrying out marine programs.

Most of the total ship repair and maintenance cost is for shipyard contractual services; the balance is for procuring material. Necessary maintenance varies for each ship from year to year depending on mission and installed machinery. Major engine overhauls and drydockings are required approximately every 3 years, whereas other overhauls, maintenance, testing, or repair to vessel hull, machinery, electrical, electronic systems, and equipment occur more frequently.

Legislation will be proposed to permit the Nautical Charting program, as well as other ocean-related programs, to be financed from a Harbor Maintenance Trust Fund transfer to the proposed Marine Waterways Trust Fund. The Harbor Maintenance Trust Fund was established by P.L. 99-662, Title XIV, and derives its revenue from a user fee on commercial cargo. The proposed legislation will increase the fee to provide the necessary additional revenues to finance these programs. Under this proposal, the Nautical Charting program would be funded by a reimbursement to the OR&F account from the Marine Waterways Trust Fund. In FY 1991, $17,649,000 of the Marine Services base program attributable to nautical charting will be financed in this manner.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Number of active ships	21*	17	18
Number of inactive ships maintained	6*	6	5
Diver training classes conducted	16	16	16

* Includes four vessels (OCEANOGRAPHER, ALBATROSS IV, JOHN N. COBB, AND DAVIDSON) that were in both active/inactive status during FY 1989.

Changes for FY 1991

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc(+) or Dec.(-)	
Marine Services	Pos./BA	750	$60,120	772	$65,848	+22	+$5,728
	FTE/Obl.	804		823		+19	

A net increase of $5,728,000 and 22 positions is requested in this subactivity to begin a limited service life extension program for NOAA ships and reactivate one vessel.

Science/Survey Platform Improvements (+$4,000,000) - This increase (object class 25.0) provides the funding to begin a modernization and service life extension program for NOAA ships. The average age of the ships in the NOAA Fleet will be 26 years in FY 1991. A correctly scheduled service life extension (SLE) can extend a ship's operating life by 15 or more years and delay the much higher cost of ship replacement. As part of the SLE, newer ship technology can be introduced into the fleet which will potentially increase productivity through more efficient operations. SLE elements include overhaul or replacement of major ship systems, modernization of laboratory spaces and hull refurbishment or reconditioning.

Reactivate NOAA Ship DAVIDSON (+25 positions, +$2,010,000) - This increase will reactivate and operate the DAVIDSON for 120 days-at-sea in support of nautical charting and bathymetric mapping in FY 1991. Data collected by the DAVIDSON are required to update charts of coastal Alaska and other U.S. coastal areas. These charts are needed primarily to allow safe marine navigation. Under the proposal for later transmittal, this effort would be funded through transfers from the Harbor Maintenance Trust Fund.

Close Southeast Marine Support Facility (-3 positions, -$282,000) - A reduction of three positions and $282,000 is requested to close the Southeast Marine Support Facility in Miami, Florida, and home port the MALCOLM BALDRIDGE at the Atlantic Marine Center, Norfolk, Virginia, where ship services can be provided more efficiently and effectively. The Southeast Marine Support Facility is principally used by ships working with NOAA's Atlantic Oceanographic and Meteorological Laboratories (AOML) and the Southeast Fisheries Center. The MALCOLM BALDRIDGE can continue to import at Miami for staging of projects supporting AOML. The proposed decrease will affect personnel in Miami, Florida.

Variable Ship Costs - The FY 1991 estimate includes $7,494,600 of variable ship costs associated with other NOAA programs. The identification of these costs with the programs they support are shown for information purposes only. The variable ship costs and associated days-at-sea support the following line items:

Line Item	Amount	Days-at-Sea
Mapping and Charting........................	$3,029,000	1,225
Estuarine and Coastal Assessment............	349,500	244
Resource Information........................	2,390,100	1,576
Interannual and Seasonal Climate............	420,000	100
Long-Term Climate and Air Quality...........	315,000	75
Marine Prediction Research..................	561,000	165
Global Change...............................	430,000	100
Total.......................................	$7,494,600	3,485

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Marine Services
Program Change: Reactivate NOAA Ship DAVIDSON

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	503
11.3	Other than full-time permanent	46
11.5	Other personnel compensation	279
11.9	Total personnel compensation	828
12.1	Civilian personnel benefits	142
21	Travel and transportation of persons	20
22	Transportation of things	20
23.2	Rental payments to others	35
25	Other services	450
26	Supplies and materials	165
31	Equipment	350
99	Direct obligations	2,010

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Marine Services
Program Change: Reactivate NOAA Ship DAVIDSON

Title:	Grade	Number	Annual Salary	Total Salaries
Chief Engineer	WM	1	71,527	71,527
1st Asst Engineer	WM	1	34,010	34,010
2nd Asst Engineer	WM	1	30,616	30,616
3rd Asst Engineer	WM	1	27,225	27,225
Jr Engineer (Unlicensed)	WM	1	20,311	20,311
Engine Utilityman	WM	1	18,544	18,544
Wiper	WM	1	14,916	14,916
Chief Boatswain	WM	1	25,101	25,101
Boatswain Group Leader	WM	1	21,695	21,695
Seaman Surveyor	WM	3	18,483	55,449
Able-Bodied Seaman	WM	1	16,060	16,060
Ordinary Seaman	WM	2	14,916	29,832
Chief Survey Technician	WM	1	25,101	25,101
Survey Technician	WM	3	19,170	57,510
Chief Steward	WM	1	21,736	21,736
Chief Cook	WM	1	19,508	19,508
2nd Cook	WM	1	16,611	16,611
Messman	WM	1	12,455	12,455
Chief Quartermaster	WM	1	20,677	20,677
Chief Yeoman	WM	1	33,481	33,481
Total		25		572,365
Less lapse 12.00%		3		68,684
Total full-time permanent		22		503,681

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	19
Other than full-time permanent	3
Total	22
Authorized Positions:	
Full-time permanent	21
Other than full-time permanent	4
Chief Quartermaster	
Total	25

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Marine Services
Program Change: Close Southeast Marine Support Facility

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.3	Other than full-time permanent	(44)
11.5	Other personnel compensation	(3)
11.9	Total personnel compensation	(47)
12.1	Civilian personnel benefits	(11)
21	Travel and transportation of persons	(5)
23.1	Rental payments to GSA	(10)
23.2	Rental payments to others	(159)
25	Other services	(19)
26	Supplies and materials	(26)
31	Equipment	(5)
99	Direct obligations	(282)

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Marine Services
Program Change: Close Southeast Marine Support Facility

Title:	Grade	Number	Annual Salary	Total Salaries
Ship Base Worker	WG-4	(2)	13,668	(27,336)
Clerk-Stenographer	GS-4	(1)	16,854	(16,854)
Total		(3)		(44,190)
Total full-time permanent				

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	(2)
Other than full-time permanent	0
Total	(2)
Authorized Positions:	
Full-time permanent	(3)
Other than full-time permanent	0
Chief Quartermaster	
Total	(3)

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Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Aircraft Services:											
Aircraft Operations and Maintenance	Pos./BA	94	6,870	93	7,181	93	7,440	93	9,306	0	1,866
	FTE/Obl.	95	6,526	94	7,581	94		94		0	
Total	Pos./BA	94	6,870	93	7,181	93	7,440	93	9,306	0	1,866
	FTE/Obl.	95	6,526	94	7,581	94		94		0	

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Program Support:											
Aircraft Services											
Aircraft Operations and Maintenance..................	FTE/obl.	1	1,775	1	1,525	1	1,525	1	1,225	0	(300)
Reimbursable obligations	FTE/obl.	1	1,775	1	1,525	1	1,525	1	1,225	0	(300)

Justification of Program and Performance

Activity: Program Support
Subactivity: Aircraft Services

Goals and Objectives

Goals: To operate a fleet of aircraft in support of NOAA's missions to: (1) monitor and predict weather and environmental conditions for the protection of life and property; (2) conduct research to advance oceanic and atmospheric technology to improve management of the environment and the rational use of our natural resources; (3) perform aerial surveys to support the nautical and aeronautical charting programs; (4) provide aerial surveys for flood forecasts; and, (5) supply airborne logistics support to various scientific programs.

Objectives: To support NOAA's research and development programs to improve weather, marine, and climate forecast services; to support the programs for nautical and aeronautical charting and river flood forecasting; to provide weather reconnaissance support to NOAA programs, Federal agencies, and international programs approved by the Under Secretary.

Base Program

The Office of Aircraft Operations (OAO) was established in October 1983, to consolidate the management of all NOAA aircraft. Fourteen aircraft located throughout the United States are managed by OAO at Miami International Airport in Florida. The OAO supports NOAA's research and development and service programs for improvement of weather, marine, and climate services; NOAA's nautical and aeronautical charting and river flood forecasting; NOAA's weather reconnaissance requirements; state, other Federal agencies, and approved international programs. The OAO is responsible for the following aircraft operations, services, and related functions:

- Atmospheric and Oceanographic Reconnaissance Operations and Research - NOAA's two fully instrumented WP-3D aircraft are the most sophisticated meteorological research platforms in the world. The aircraft research and navigation systems provide detailed spatial and temporal observations of a wide range of atmospheric and oceanic parameters in support of severe weather research, air/sea interaction, ocean dynamics and climate and global change programs. OAO develops and calibrates specialized instrumentations, integrates user-supplied instruments into the automated systems, and processes and analyzes data sets obtained from various field programs. This line item funds management of all NOAA aircraft operations.

- Hurricane Reconnaissance - OAO aircraft provide high density/accuracy hurricane data to the National Hurricane Center in near real-time. Storm data are transmitted via the aircraft satellite data link to upgrade forecasting models of hurricane track/intensity. Because of this capability, the OAO provides reconnaissance for hurricanes within 24 hours of landfall on the United States and its territories. Additionally, the OAO augments reconnaissance by DOD aircraft on developing tropical storms and provides hurricane reconnaissance over foreign airspace where military aircraft may be prohibited.

- Photogrammetric Operations - OAO conducts specialized aerial surveys and provides aerial photographs for the production of shoreline maps, shoreline revision data, nearshore bathymetric data for nautical charts, geodetic control establishment and storm evacuation routes; to position landmarks and aids to navigation; and to support other NOAA activities such as natural disaster damage assessment.

Gamma Snow Survey Program - OAO conducts an Airborne Snow Survey Program to obtain soil moisture and snow water equivalent data from a network of 350 flight lines. OAO provides the data to the National Weather Service (NWS) River Forecast Centers in Kansas City and Minneapolis, for use in issuing river and flood forecasts as part of the NWS Hydrologic Service Program.

Aeronautical Charting Operations - OAO conducts comprehensive aerial reviews of NOAA produced aeronautical charts depicting the National Airspace System. Specialized products required for safety of flight (Minimum Safe Altitude Warning data and precise obstruction location information) are gathered to ensure safe air travel. The aircraft services subactivity administers the operations of the aircraft supporting this program. The aircraft are base funded for the NOS aeronautical charting program and are partially reimbursable by FAA.

Air Quality Research Program - OAO supports airborne air quality research measurements for NOAA's Environmental Research Laboratories (ERL) including research to measure, understand, and model the physical, chemical and dynamic processes of the upper and lower atmosphere. This study includes the possible effects of the introduction of man-made pollutants. Operational funds are provided by the program.

Helicopter Support - OAO uses helicopters to support National Ocean Service, Office of Oceanic and Atmospheric Research, National Marines Fisheries Service programs such as the Outer Continental Shelf Environmental Assessment Program (OCSEAP). The following services are included: hydrographic, tide and oceanographic observations in the Arctic, tropical and remote locations; collection of biological, geological, and oceanographic specimens and samples; marine law and sanctuary enforcement; logistic transportation to otherwise inaccessible areas; and shipboard operations.

Summary of Workload Performance Measures

	1989 Actual	1990 Estimate	1991 Base Level	1991 Estimate
Flight hours flown (all aircraft)..................................	1,726	1,680	1,680	2,080

Increases for FY 1991

(Dollar amount in thousands)

		1991 Base		1991 Estimate		Inc.(+) or Dec. (-)	
Aircraft Operations and Maintenance..	Pos/BA	94	$7,440	94	$9,306	0	$1,866
	FTE/Obl	93		93		0	

Aircraft Operations and Maintenance Funding. (+$741,000) An increase of $741,000 is requested to meet increasing aircraft operations and maintenance requirements. Funds are required to provide for orderly replacement of aircraft avionics and navigation systems, recovery from aircraft catastrophic failures and maintenance of aviation proficiency to ensure safe and efficient performance of NOAA flight operations.

The average age of NOAA aircraft is 15 years. With increasing age, additional maintenance is required to maintain operational status and extend useful service lives of the aircraft. The initial capital investment in NOAA's 14 specially mission-configured aircraft was $30 million. Replacement of these aircraft would require $123 million. This request for operations and maintenance funding should be viewed as a cost effective approach to protecting the government's investment in these resources.

The typical useful life for and avionics and navigation instrumentation is 10 years. Most aircraft instrumentation is operating beyond its design life. Eventually these systems will experience a non-recoverable failure; when this occurs the aircraft may be decommissioned. It is essential that the systematic replacement of these systems be initiated in 1991 or the availability of aircraft support to scientific investigations or hurricane reconnaissance missions when required, cannot be guaranteed.

As NOAA's aircraft age, major repairs to replace propulsion and airframe systems are required with increasing frequency. Funding must be available to allow for the rapid recovery from a catastrophic systems failure. NOAA's aircraft support services are provided under restrictive time and weather constraints. Delays in accomplishing required repairs compromise programmatic effectiveness. A substantial increase in requirements for Pilot/Navigator training is anticipated due to the recent retirement and reassignment of a significant number of experienced aviators. It is imperative that funds be budgeted to train replacements, and to up-grade the qualifications of existing personnel. Pilots and navigators require extensive training to achieve the level of proficiency necessary to operate safely in the hazardous flight regimes common to NOAA's missions. It is critical that flight training be scheduled for FY 1991 to ensure that high-visibility projects like TOGA can be adequately supported in subsequent years with qualified pilots. Assigning a high priority to funding for both initial training and pilot proficiency is critical to the safe and efficient performance of NOAA flight operations.

Aircraft Navigation Subsystem Replacement (+$1,125,000) - An increase of $1,125,000 is requested to replace obsolete but critical components of the airborne navigation system used on NOAA's two WP-3D research aircraft. The remaining $550,000 of the total navigation subsystem requirement of $1,675,000 will be sought in FY 1992.

The WP-3D's are complex airborne laboratories and are used to support hurricane research and reconnaissance and other research initiatives in the area of global change, coastal ocean, acid rain and atmospheric and ocean research programs (including El Nino) for NOAA and the U.S. scientific community.

Navigation system equipment is critical to the success of all projects that the WP-3D aircraft support. The system provides essential position, altitude, and velocity information used both by the aircraft flight systems and the scientific data acquisition systems. The existing system was acquired in 1975 and it is becoming increasingly unreliable as it ages. The frequency of failure in the old equipment and the lead time to obtain spare or reworked components is increasing. Scientific programs costing millions of dollars for planning, ground preparation, personnel support and data analysis are jeopardized by the steady degradation of the reliability of the 14 year-old navigation systems.

NOAA plans to replace the current Omega navigation units with Global Positioning System navigation units. The position accuracy of the Omega units can vary by as much as 10 nautical miles during the course of a single flight. The GPS units can provide position accuracy to 100 meters. These improvements in position and velocity accuracy will improve hurricane center position reporting and wind speed/hurricane intensity measurements.

The requested funding will permit NOAA to purchase four GPS units; one per aircraft and one flight-ready spare per aircraft. In addition, five inertial reference platforms will be purchased; two per aircraft and one flight-ready spare.

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Aircraft Services
Program Change: Aircraft Operations & Maintenance

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	95
25	Other services	266
26	Supplies and materials	300
31	Equipment	80
99	Direct obligations	741

Department of Commerce
National Oceanic and Atmospheric Administration
Operations, Research and Facilities
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: Program Support
Subactivity: Aircraft Services
Program Change: Aircraft Navigation Subsystem Replacement

Object Class		1991 Increase/ (Decrease)
21	Travel and transportation of persons	13
22	Transportation of things	7
23.2	Rental payments to others	2
25	Other services	544
26	Supplies and materials	8
31	Equipment	551
99	Direct obligations	1,125

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	388,057	385,149	(2,908)
11.3	Other than full-time permanent	18,724	18,707	(17)
11.5	Other personnel compensation	21,065	21,177	112
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	427,846	425,033	(2,813)
12.1	Civilian personnel Benefits	77,846	78,025	179
13	Benefits for former personnel	6,162	6,162	0
21	Travel and transportation of persons	17,027	17,331	304
22	Transportation of things	6,368	7,082	714
23.1	Rental payments to GSA	26,534	26,403	(131)
23.2	Rental payments to others	12,514	11,814	(701)
23.3	Communications, utilities and miscellaneous charges	50,386	57,669	7,283
24	Printing and reproduction	6,364	6,712	348
25	Other services	434,499	485,798	51,299
26	Supplies and materials	45,434	50,376	4,942
31	Equipment	27,549	80,870	53,321
32	Lands and structures	1,253	13,502	12,249
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	147,554	125,175	(22,379)
42	Insurance claims and indemnities	11	11	0
43	Interest and dividends	1	1	0
44	Refunds	0	0	0
99	Total, Direct Obligations	1,287,348	1,391,964	104,616
	Reimbursable Obligations	310,346	295,424	(14,922)
	TOTAL OBLIGATIONS	1,597,694	1,687,388	89,694

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time permanent	11,281	11,174	(107)
Other than full-time permanent	1,143	1,143	0
Total	12,424	12,317	(107)
Authorized Positions:			
Full-time permanent	10,389	10,298	(91)
Other than full-time permanent	1,006	1,006	0
Total	11,395	11,304	(91)

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

OBJECT CLASS		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	254	254	0
	Senior Executive Service	7,318	7,318	0
	General schedule	349,323	346,001	(3,322)
	Commissioned officers	17,815	17,815	0
	Wage board/wage marine	12,677	13,091	414
	Scientific & professional (P.L. 80-313)	460	460	0
	Students			
	Subtotal	388,057	385,149	*(2,908)
11.3	Other than full-time permanent			
	General schedule	16,434	16,355	(79)
	Wage board/wage marine	2,187	2,249	62
	Consultants, experts	66	66	0
	Hourly			
	Subtotal	18,724	18,707	(17)
11.5	Other personnel compensation			
	Overtime	11,941	12,189	248
	Cash awards	3,813	3,813	0
	Other	5,311	5,175	(136)
	Subtotal	21,065	21,177	112
11.8	Special personnel services payments	0	0	0
	Foreign service officers (State)	0	0	0
	Other	0	0	0
	Subtotal	0	0	0
11.9	Total personnel compensation	427,846	425,033	(2,813)

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

OBJECT CLASS		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits			
	Civil service retirement	25,495	24,985	(510)
	Federal Employee Retirement	14,032	14,591	559
	Medicare	5,237	5,171	(66)
	Thrift savings plan	1,923	1,950	27
	Federal insurance contribution act	2,856	3,009	153
	Health insurance	19,776	19,692	(84)
	Life insurance	902	887	(16)
	Overseas allowance (COLA)	4,187	4,158	(29)
	Employees comp fund (bec)	3,309	3,309	0
	Other	129	274	145
	Subtotal	77,846	78,025	179
13.0	Benefits for former personnel			
	Retired Pay	5,100	5,100	0
	Health benefits	170	170	0
	Other	892	892	0
	Subtotal	6,162	6,162	0
21	Travel and transportation of persons			
	Aircraft rental	38	38	0
	GSA vehicles	519	519	0
	Administrative travel	4,692	4,757	65
	Program travel	11,778	12,017	239
	Subtotal	17,027	17,331	304
22	Transportation of things			
	Trans of household goods	1,828	2,008	180
	GSA trucks	1,699	1,696	(3)
	Other	2,841	3,378	537
	Subtotal	6,368	7,082	714
23.1	Rental payments to GSA	26,534	26,403	(131)
23.2	Rental payments to others	12,514	11,814	(701)

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

	OBJECT CLASS	1991 Base	1991 Estimate	Increase/ (Decrease)
23.3	Communications, utilities and miscellaneous charges			
	Utility services	(18)	(111)	(93)
	Aircraft charter	0	0	0
	Vessel charter	49	(61)	(110)
	Rental of office copying equipment	0	(5)	(5)
	Rental of ADP equipment	10,847	11,847	1,000
	Federal telecommunications system	22	18	(4)
	Other telecommunications services	325	2,136	1,811
	Postal services by USPS	3,487	3,487	0
	Other	35,674	40,358	4,684
	Subtotal	50,386	57,669	7,283
24	Printing and reproduction			
	Publications	2,410	2,662	252
	Public use forms			
	Enevelopes			
	Other	3,954	4,050	96
	Subtotal	6,364	6,712	348
25	Other services			
	Aircraft repair	575	1,325	750
	Vessel repair	7,462	11,862	4,400
	Contracts for research	28,351	29,384	1,033
	Maintenance of equipment	10,868	10,945	77
	Training:			
	University training	953	953	0
	CS commission training	198	198	0
	Other	1,868	2,235	367
	Substation observers	1,868	1,868	0
	Other Federal Agencies	360,576	362,236	1,660
	Contracts for consulting service	100	100	0
	GSA alterations	632	632	0
	Working capital fund	150	150	0
	Other	21,035	64,047	43,012
	Subtotal	434,499	485,798	51,299

Department Of Commerce
National Oceanic and Atmospheric Administration
Operations, Research, and Facilities
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

OBJECT CLASS		1991 Base	1991 Estimate	Increase/ (Decrease)
26	Supplies and materials			
	Chart paper	1,836	1,836	0
	Met. upper air	5,719	5,719	0
	Maintenance of vessel	1,536	1,536	0
	Gases	1,030	1,030	0
	Fuel	5,329	5,507	178
	ADP supplies	3,275	3,275	0
	Other	26,709	31,473	4,764
	Subtotal	45,434	50,376	4,942
31	Equipment			
	Office machines and equipment	1,969	1,969	0
	ADP hardware	11,235	19,228	7,993
	Other capitalized	3,659	45,245	41,586
	Non-capitalized	10,686	14,429	3,743
	Subtotal	27,549	80,870	53,321
32	Lands and structures	1,253	13,502	12,249
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	147,554	125,175	(22,379)
42	Insurance claims and indemnities	– 11	11	0
43	Interest/dividends..	1	1	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	1,287,348	1,391,964	104,616
	Reimbursable Obligations	310,346	295,424	(14,922)
	TOTAL OBLIGATIONS	1,597,694	1,687,388	89,694

Personnel Summary

	1989 Actual	1990 Estimate	1991 Estimate
Total number of full-time permanent positions	11,462	11,443	11,344
Total compensable workyears:			
Full-time equivalent employment	12,515	12,498	12,384
Full-time equivalent of overtime and holiday hours	434	434	434
Average ES salary	$75,704	$78,458	$95,372
Average GS grade	9.89	9.89	9.89
Average GS salary	$32,619	$33,740	$34,917
Average salary of ungraded positions	$23,318	$24,274	$24,337

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National Oceanic and Atmospheric Administration
Operations, Research, and Facilities

Consulting and Related Services
(obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	$ 203	$ 870	$ 645
Management and professional services	28	57	47
Special studies and analyses	4,489	6,436	6,506
Management and support services for research and development	66	68	68
Total	$4,786	$7,431	$7,266

Consulting services are those services of a purely advisory nature relating to the governmental functions of agency administration and management and agency program management. These services are normally provided by persons or organizations generally considered to have knowledge and special abilities that are not usually available within the agency. Such services can be obtained through personnel appointments, procurement contracts, or advisory committees.

Management and professional services deal with management data collection, policy review or development, program development, review or evaluation, systems engineering and other management support services. Special studies and analyses deal with the highly specialized areas of agency activity, e.g. air quality, chemical, environmental, geophysical, oceanological, technological, etc. Management and support services for research and development are procurement actions that meet the description of management and professional services or special studies and analyses, but are funded under research and development.

NOAA proposes a decrease of $165,000 in consulting and related services expenditures for FY 1991 due to changes in program emphases. A brief description of expenditures for consulting and related services by activity follows:

National Ocean Service ($3,006,000) - Consulting services are to support the Tide and Sea Level program and for completion of the multipurpose land information systems guide book. Special studies which are the bulk of the expenditures in this area will be used to determine the dollar value of injuries to NOAA trust resources caused by discharges of oil or release of hazardous substances. Other studies are to support future Deep Seabed Mining Regulatory decisions and Marine and Estuarine legal actions.

National Marine Fisheries Service ($2,515,000) - During FY 1989 consulting services were used for ADP systems analysis, biological modeling of specific or groups of fisheries, and socioeconomic analysis of various fishery management plans. Studies and analyses were used in FY 1989 for better management of fisheries, marine mammals, endangered species and for Marine Recreational Fishery activities. Continuation of these services is planned in FY 1991.

National Weather Service ($547,000) - A five year contractual consulting services contract was let in FY 1990 with the National Research Council to analyze, study and review implementation plans to modernize and restructure the National Weather Service. Special studies are required for ADP communication systems analyses.

National Environmental Satellite, Data, and Information Services ($25,000) - Management and professional services were used in FY 1989 for program management support, and special studies and analyses for the Assessment and Information Services Center. In FY 1990 and 1991, these services will decrease substantially.

Oceanic and Atmospheric Research ($159,000) - Consulting services are for the Sea Grant Review Panel and for the NOAA Panel on Climate and Global Change to provide external guidance and review on funding, program balance, and coordination with the outside community.

Program support ($1,016,000) In FY 1989, $1 million was expended in special studies and analysis for Small Business Innovation Research (SBIR) contracts. This service will continue in FY 1990 and 1991 with $1 million in funding. The Office of the General Counsel plans to use two expert consultants in FY 1991 as the office reviews possible legal action against parties responsible for damage to natural resources in the Damage Assessment and Restoration program. Another consultant will be employed in the Office of Legislative Affairs to assist with policy development. The NOAA Corps customarily contracts for an actuary report on the Commissioned Officers' retirement system. In FY 1990, the Office of Public Affairs will use a contractor as a member of the NOAA Survey Team to assess the damage response system related to Hurricane Hugo.

National Oceanic and Atmospheric Administration
Operations, Research and Facilities

(Periodicals, Pamphlets, and Audiovisual Products)
(obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$ 713	$ 695	$ 797	$ 713
Pamphlets	248	421	431	436
Audiovisuals	117	48	202	205
Total	$1,078	$1,164	$1,430	$1,354

NOAA proposes a total decrease of $76,000 in the use of base funds for periodicals, pamphlets, and audiovisual products for FY 1991. This is reflected by a one-time publication of the Hydrographic Manual approximate cost $75,000, scheduled for publishing in FY 1990. Planned expenditures for these items by activity follows:

National Ocean Service ($96,000) - Expenditures are for periodicals, pamphlets, manuals, and audiovisuals, relating to thu Nautical Charting, the Ocean Services programs, and the the National Geodetic Survey. In addition, the Biennial Report to Congress on Coastal Zone Management will be printed and pamphlets issued regarding NOAA's National Marine Sanctuaries.

National Marine Fisheries Service ($437,000) - Expenditures are for periodicals (market news reports, fishery bulletins, regional newsletters, and the National Marine Fishery Service Review) and pamphlets on inspection, and grading and domestic/export marketing.

Oceanic and Atmospheric Research ($15,000) - Expenditures are for weekly forecast reports on solar-geophysical activity.

National Weather Service ($450,000) - Expenditures are for various weather service charts, maps, bulletins, newsletters, and reports on climate, fire weather, floods, hurricanes, tornadoes, and winter storms.

National Environmental Satellite, Data, and Information Services ($155,000) - Expenditures are for technical data periodicals on meteorology, oceanography, solid-earth geophysics, solar-terrestrial physics, and satellite meteorology. The National Environmental Satellite, Datu, and Information Service also publishes scientific and technical pamphlets which report the results of operational, developmental, and research programs of NOAA, and manuals for the operational programs of the agency. Audiovisual products are primarily slides and viewgraphs used for technical presentations of operational programs at academic and professional society meetings.

Program support ($181,000) - Expenditures are for miscellaneous handbooks for the Office of Aircraft Operations, pamphlets on NOAA work activities, and audiovisuals for public service announcements.

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Justification of Program and Performance

Appropriation: Promote and Develop Fishery Products and Research Pertaining to American Fisheries
(Saltonstall-Kennedy Fund)

1989

In FY 1989, the S-K transfer from the Department of Agriculture to NOAA was $53,688,000. Of this amount, $45,600,000 was used to offset the Operations, research and facilities appropriation. An additional amount of $3,000,000 was transferred to the Fisheries Promotional Fund. The remaining $5,088,000 was used to provide assistance grants for the development of the U.S. fishing industry.

1990

In FY 1990, the S-K transfer from the Department of Agriculture to NOAA was $61,935,000. Of this amount, $55,000,000 was used to offset the operations, research and facilities appropriation. An additional amount of $2,000,000 was transferred to the Fisheries Promotional Fund. The remaining $4,935,000 will be used to provide assistance grants for the development of the U.S. fishing industry. For FY 1990, up to $500,000 in the S-K Fund can be used for grant management and related activities. This will support 11 positions transferred from the ORF account to administer the program.

1991

For FY 1991, NOAA proposes that the entire S-K transfer (est. $61,900,000) from the Department of Agriculture be transferred to the Operations, research, and facilities account to fund fishery conservation and management programs. No funding is proposed for S-K industry assistance grants and the Fisheries Promotional Fund to support the National Seafood Promotional Council. The Fisheries Promotional Fund expires September 30, 1990 and is not proposed for reauthorization in FY 1991. The industry assistance program and the development of seafood marketing plans are inappropriate NOAA roles. Industry, the direct beneficiaries of these efforts, should fund these specific development efforts.

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Department of Commerce
National Oceanic and Atmospheric Administration
Fisheries Promotional Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA			3	2,000
	Sequester applied, 1990	FTE/Obl.				0
	Appropriation currently available, 1990					2,000
NOAA-261	FY 1991 Adjustments to base:					
	Transfers		(3)			
	Adjustment for 1990 pay increase and related costs					
	Other cost changes			0		
	Subtotal, adjustments to base:				(3)	
	1991 Base	Pos./BA			0	2,000
		FTE/Obl.				

Page No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA-263	Fisheries Promotional Fund	Pos./BA	3	3,000	3	2,000	(3)	2,000	0	0	0	(2,000)
		FTE/Obl.		3,421		4,732	(3)					
	TOTAL	Pos./BA	3	3,000	3	2,000	(3)	2,000	0	0	0	(2,000)
		FTE/Obl.	0	3,421	0	4,732						

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Justification of Adjustment to Base and Built-in Changes

(Dollar amounts in thousands)

Appropriation: Fisheries Promotional Fund

	Perm. Pos.	Amount
Transfers	-3	0

Three positions and three FTE no longer required in the Fisheries Promotional Fund will be transferred to the Operations, Research, and Facilities account.

Justification of Program and Performance

Appropriation: Fisheries Promotional Fund

1989

In FY 1989, $3,000,000 was transferred to the Fisheries Promotional Fund from the Promote and Develop Fishery Products and Research Pertaining to American Fisheries (S-K Fund) to support the activities of the National Fish and Seafood Promotional Council.

1990

In FY 1990, $2,000,000 was transferred to the Fisheries Promotional Fund from the S-K Fund to support the activities of the National Fish and Seafood Promotional Council.

1991

The Fisheries Promotional Fund expires September 30, 1990 and reauthorization is not proposed. Marketing activities such as the National Seafood Promotional Council, should be supported by the fishing industry. Therefore, a transfer of funds from the S-K Fund is not requested in 1991. NOAA proposes to transfer all S-K Funds to the ORF account to support fishery management and conservation programs.

Department of Commerce
National Oceanic and Atmospheric Administration
Fisheries Promotional Fund
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Subactivity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Fisheries Promotional Fund	Pos./BA	3	3,000	3	2,000	(3)	2,000	0	0	(3)	(2,000)
	FTE/Obl.		3,421		4,732						
Total	Pos./BA	3	3,000	3	2,000	(3)	2,000	0	0	(3)	(2,000)
	FTE/Obl.		3,421		4,732						

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Appropriation Summary Statement

Appropriation: Fishing Vessel and Gear Damage Compensation Fund

The Fisherman's Protective Act of 1967, as amended by P.L. 95-376, Section 10 (f) (1), September 18, 1978, and P.L. 96-561 of 1980 require that the Secretary of Commerce provide compensation to fishing vessel owners who sustain losses or damage to their gear or vessels while engaged in any fishery subject to the exclusive fishery management authority of the United States under the provisions of the Magnuson Fishery Conservation and Management Act of 1976, provided that the loss is attributable to any foreign vessel, or its crew, or its fishing gear.

The appropriation shall be derived from: (1) all sums recovered in the exercise of rights subrogated under subsection (d) (5) of the Act; (2) administrative fees collected from applicants for compensation; (3) all surcharges imposed upon foreign fishing permit fees not to exceed 20 percent; (4) revenue obtained through the investment of funds collected and not currently needed; and (5) any revenue acquired by borrowing from the Treasury.

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Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel and Gear Damage Compensation Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA			3	1,000
		FTE/Obl.			3	1,087
	Sequester applied, 1990				0	0
	Appropriation currently available, 1990	Pos./BA			3	1,000
		FTE/Obl.			3	1,087
NOAA-270	FY 1991 Adjustments to base:					
	Transfers					
	Adjustment for 1990 pay increase			5		
	Other cost changes			197		
	Subtotal, adjustments to base:				0	202
	1991 Base	Pos./BA			3	1,202
		FTE/Obl.			3	

			1989 Actual		1990 - Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA-272	Fishing Vessel and Gear Damage Compensation Fund:											
	Administrative Expenses	Pos./BA	3	0	3	46	3	138	3	138	0	0
		FTE/Obl.		127		133						
	Payment of Claims	Pos./BA		0		954		1,064		1,064	0	0
		FTE/Obl.		733		954						
	TOTAL	Pos./BA	3	0	3	1,000	3	1,202	3	1,202	0	0
		FTE/Obl.		860		1,087						

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Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel and Gear Damage Compensation Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	
Total Obligations	860	1,087	1,202	1,202	0
Financing:					
Offsetting collections from:					
Federal funds					
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year	(947)	(87)	0	0	0
Unobligated balance transferred					
Unobligated balance, end of year	87				
Unobligated balance lapsing					
Budget Authority	0	1,000	1,202	1,202	0
Transferred to /from other accounts					
Appropriation	0	1,000	1,202	1,202	0

Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

Appropriation: Fishing Vessel and Gear Damage Compensation Fund

Other Increases:

NOAA requests an appropriation of $1,202,000 to pay claims and administrative expenses under the Fishing Vessel Gear Damage Compensation Fund (FVGDCF). The FY 1990 appropriation level of $1,000,000 will not be sufficient to meet program needs in FY 1991. The requested increase of $197,000 from unappropriated balances in the Fund is necessary to eliminate a backlog of claims, avoid delays in paying claims and to maintain administrative support for the program. Without an appropriation at the requested level NOAA may be unable to meet its statutory obligations.

Adjustment for 1990 pay increase and related cost:

	Pos.	Amount
Total cost in 1990 of pay increase		4
Less amount absorbed		-4
Anticipated 1990 pay increase supplemental		0
Amount in 1991 to provide full-year cost of pay increase		5
Less amount absorbed		0
Subtotal, adjustment in 1990 pay increase		5

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase.

Adjustment for 1991 pay increases and related cost:

	Pos.	Amount
Total cost in 1991 of general pay increase		4
Less amount absorbed		-2
Subtotal, adjustment for 1991 general pay increase		2
Total cost in 1991 of SES pay increase		0
Less amount absorbed		0
Subtotal, adjustment for 1991 SES increased		0
Total adjustment for 1991 pay increases		2

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. Seventy-five percent of the 1991 costs of that increase will be absorbed.

	Pos.	Amount
Fishing Vessel and Gear Damage Compensation Fund	0	+$195,000

Appropriation Language and Code Citations:

1. For carrying out the provisions of section 3 of Public Law 95-376.

22 USC 1980 (b)

22 USC 1980 (b) - Damages to fishing vessels and gear, compensation.

"Subject to the provisions of this section, the owner or operator...of any fishing vessel...of the United States is eligible for monetary compensation...for any damage to, loss of, or destruction of such vessel, or any fishing gear...or both, if the damage, loss, or destruction-"(1) in the case if such vessel -

"(A) occurs when such vessel is engaged in any fishery subject to the exclusive fishery management authority of the United States under the Magnuson Fishery Conservation and Management Act of 1976, and
"(B) is attributable to any vessel (or its crew or fishing gear) other than a vessel of the United States; or
"(2) in the case of such fishing gear-
"(A) occurs when such fishing gear is being used for fishing in any fishery subject to such exclusive management authority, and
"(B) is attributable to any other vessel, whether such vessel of the United States.

2. not to exceed $1,000,000 to be derived from receipts collected pursuant to that Act,

22 USC 1980 (f) - Fishing vessel and Gear Damage Compensation fund establishment.

"Sums may be expended from the fund only to such extent and in such amounts as are provided in advance in appropriation Acts."

3. to remain available until expended.

no specific authority

31 USC 718 - Appropriations in annual appropriation Acts not permanent, states: "No specific or indefinite appropriation...shall be construed to be permanent or available continuously...unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the appropriation Act in which it is contained makes provision."

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel and Gear Damage Compensation Fund
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
bactivity:											
dministrative	Pos./BA	3	0	3	46	3	138	3	138	0	0
Expenses	FTE/Obl.		127		133						
yment of Claims	Pos./BA		0		954		1,064		1,064	0	0
	FTE/Obl.		733		954						
Total	Pos./BA	3	0	3	1,000	3	1,202	3	1,202	0	0
	FTE/Obl.		860		1,087						

Justification of Program and Performance

Activity: Fishing Vessel and Gear Damage Compensation Fund
Subactivity: Fishing Vessel and Gear Damage Compensation Fund

Goals and Objectives

Goals: Compensate domestic fishermen whose fishing vessels have been lost, damaged or destroyed by foreign vessel operations in the United States' Exclusive Economic Zone (EEZ) or whose fishing gear has been lost, damaged, or destroyed in the EEZ by foreign or domestic vessels.

Objectives: Compensate vessel owners for loss, damage or destruction of fishing vessel or gear. Provide for timely resolution of claims by vessel owners. Administer the Fund's resources efficiently and effectively.

Base Program

The Fishing Vessel and Gear Damage Compensation Fund is authorized by Section 10 of the Fishermen's Protective Act of 1967, as amended (P.L. 95-376 and P.L. 96-561). It compensates U.S. fishermen whose vessels have been lost, damaged, or destroyed by foreign or domestic vessels. NOAA administers the Fund and indemnifies domestic fishermen against the commercially uninsurable loss of fishing gear caused by foreign or domestic vessels and a portion of the associated economic loss. The risk of losing expensive fishing gear is a major destabilizing factor in some fisheries. Monies paid into this Fund include:
(1) surcharges not to exceed 20 percent of the fee imposed for any foreign fishing vessel permit issued under the Magnuson Fishery Conservation and Management Act;
(2) administrative fees paid by claimants; (3) revenues from deposits or investments of Fund balances not immediately required; and (4) funds not to exceed $5 million borrowed from the Treasury in the event the Fund balance is insufficient to pay claims.

While funded totally by user fees, disbursements can be made only to the extent authorized by appropriation acts.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Number of claims received..	152	160	165
Number of claims processed..	109	110	130

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel and Gear Damage Compensation Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	94	94	
11.3	Other than full-time permanent			
11.5	Other personnel compensation			
11.8	Special personnel services payments			
11.9	Total personnel compensation	94	94	
12.1	Civilian personnel Benefits	15	15	
13	Benefits for former personnel			
21	Travel and transportation of persons	1	1	
22	Transportation of things			
23.1	Rental payments to GSA			
23.2	Rental payments to others			
23.3	Commun., util., misc. charges	7	7	
24	Printing and reproduction			
25	Other services	7	7	
26	Supplies and materials	2	2	
31	Equipment	12	12	
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities	1,064	1,064	
43	Interest and dividends			
44	Refunds			
99	Total, Direct Obligations	1,202	1,202	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,202	1,202	

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel and Gear Damage Compensation Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time permanent	3	3	
Other than full-time permanent			
Total	3	3	
Authorized Positions:			
Full-time permanent	3	3	
Other than full-time permanent			
Total	3	3	

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel Gear Damage and Compensation Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level			
	Senior executive service			
	General schedule	94	94	
	Commissioned officers			
	Wage board/wage marine			
	Scientific & professional (P.L. 80-313)			
	Students			
	Subtotal	94	94	
11.3	Other than full-time permanent			
	General schedule			
	Wage board			
	Experts & consultants			
	Hourly			
	Subtotal			
11.5	Other personnel compensation			
	Overtime			
	SES performance awards			
	Cash awards			
	Merit pay awards			
	Other			
	Subtotal			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel Gear Damage and Compensation Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
11.8	Special personnel services payments			
	Foreign service officers (State)			
	Other			
	Subtotal			
11.9	Total personnel compensation	94	94	
12.1	Civilian personnel benefits			
	Civil service retirement	10	10	
	Federal employees' retirement			
	Thrift savings plan			
	Federal insurance contribution act	2	2	
	Health insurance	2	2	
	Life insurance	1	1	
	Employees' compensation fund			
	Other			
	Subtotal	15	15	
13	Benefits for former personnel			
	Severance pay			
	Unemployment compensation			
	Other			
	Subtotal			
21	Travel and transportation of persons			
	Common carrier			
	Mileage			
	Per diem/actual	1	1	
	Vehicular			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel Gear Damage and Compensation Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
	Other			
	[Overseas estimates]			
	Subtotal	1	1	
22	Transportation of things			
	[Overseas estimates]			
23.1	Rental payments to GSA			
23.2	Rental payments to others			
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	3	3	
	Rental of office copying equipment	2	2	
	Other equipment rental			
	Federal telecommunications system			
	Other telecommunications services	2	2	
	Postal Service by USPS			
	Other			
	[Overseas estimates]			
	Subtotal	7	7	
24	Printing and reproduction			
	Publications			
	Public use forms			
	Envelopes			
	Other			
	[Payments to GA, WCF]			
	[Overseas estimates]			
	Subtotal			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel Gear Damage and Compensation Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
25	Other services			
	Training:			
	University			
	Office of personnel management			
	Other			
	Maintenance of equipment			
	GSA reimbursable services			
	ADP services			
	Telecommunications services			
	Payments to GA, WCF			
	Other non-government contracts	7	7	
	Other			
	[Overseas estimates]			
	Subtotal	7	7	
26	Supplies and materials			
	Office supplies	2	2	
	ADP supplies			
	Other			
	[Overseas estimates]			
	Subtotal	2	2	
31	Equipment			
	Office machines and equipment	12	12	
	ADP hardware			
	ADP software			
	Other			
	[Overseas estimates]			
	Subtotal	12	12	

Department of Commerce
National Oceanic and Atmospheric Administration
Fishing Vessel Gear Damage and Compensation Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities	1,064	1,064	
43	Interest and dividends			
44	Refunds			
99	Subtotal, Direct Obligations	1,202	1,202	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,202	1,202	

Appropriation Summary Statement

Appropriation: Fishermen's Contingency Fund

Title IV of the Outer Continental Shelf Lands Act Amendments of September 18, 1978, (P.L. 95-372, Section 402) as amended, established the Fishermen's Contingency Fund. The Fund is to be used by the Secretary of Commerce to compensate domestic fishermen for the damage or loss of fishing gear, and any resulting economic loss due to natural obstructions or man-made obstructions related to oil and gas exploration, development, and production in any area of the Outer Continental Shelf.

For purposes of administration, the Secretary of Commerce is authorized to establish the Fishermen's Contingency Fund to pay claims and to request assessment by the Secretary of the Interior of the oil and gas industry to capitalize the Fund. Any holder of a lease, an exploration permit, easement, or right of way on the Outer Continental Shelf is required to pay to the Secretary of the Interior an amount not to exceed $5,000 per lease, permit, easement, or right of way per calendar year. The Secretary of the Interior will deposit these collections in the Fishermen's Contingency Fund established by the Secretary of Commerce.

Title IV stipulates that amounts available can be disbursed only to the extent provided for by appropriations acts.

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Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund

SUMMARY OF RESOURCE REQUIREMENTS

(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA			1	736
		FTE/Obl.			2	
	Sequester Applied, 1990				0	(2)
	Appropriations Currently Available, 1990	Pos.BA			1	734
		FTE/Obl.			2	
NOAA-286	FY 1991 Adjustments to base:					
	Transfers					
	Adjustment for 1990 pay increase and related costs			2		
	Other cost changes			264		
	Subtotal, adjustments to base:					266
	1991 Base	Pos./BA			1	1,000
		FTE/Obl.			2	

	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA-288	Fisherman's Contingency Fund Administrative Expenses	Pos./BA	1	51	1	50	1	54	1	54	0	0
		FTE/Obl.	2	51	2		2		2			
	Payment of Claims	Pos./BA		668		684		946		946		0
		FTE/Obl.		667								
	TOTAL	Pos./BA	1	719	1	734	1	1,000	1	1,000	0	0
		FTE/Obl.	2	718	2		2		2			

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Department of Commerce
National Oceanic and Atmospheric Administration
Fisherman's Contingency Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	
Total Obligations	718	734	1,000	1,000	0
Financing:					
Offsetting collections from:					
Federal funds					
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year	(7)	(8)	(8)	(8)	
Unobligated balance transferred					
Unobligated balance, end of year	8	8	8	8	
Unobligated balance lapsing					
Budget Authority	719	734	1,000	1,000	0
Transferred to /from other accounts					
Sequester		2			
Appropriation	719	736	1,000	1,000	0

Justification of Adjustments to Base and Built-in Changes

Appropriation: Fishermen's Contingency Fund

Other increases:	Pos.	Amount
Fishermen's Contingency Fund	0	+$264

To keep pace with claim demands, an adjustment to the FY 1990 appropriation is required. An appropriation of $1,000,000 from fees collected is requested for FY 1991, an increase of $264,000 over the FY 1990 level, to meet claim demands.

Adjustment for 1990 pay increase and related costs:

	Pos.	Amount
Total cost in 1990 of pay increase	0	1
Less amount absorbed	0	-1
Anticipated 1990 pay increase supplemental	0	0
Amount in 1991 to provide full-year cost of pay increase	0	2
Less amount absorbed	0	0
Subtotal, adjustment in 1990 pay increase	0	2

Appropriation Language and Code Citations:

1. For carrying out the provisions of Title IV of Public Law 95-372,

43 USC 1843

43 USC 1843 - Duties and Powers.

"Payments shall be disbursed by the Secretary...to compensate commercial fishermen for actual and consequential damages, including loss of profits due to damages to, or loss of, fishing gear by materials, equipment, tools, contains, or other items associated with oil and gas exploration, development, or production activities..."

2. not to exceed $750,000 to be derived from receipts collected pursuant to the Act,

43 USC 1842

43 USC 1842 - Establishment of the Fishermen's Contingency Fund

"Amounts...shall be disbursed, subject to such amounts as are provided in appropriations Acts,..."

3. to remain available until expended.

no specific authority

31 US 718 - Appropriations in annual appropriation Acts not permanent, states: "No specific or indefinite appropriation...shall be construed to be permanent or available continuously...unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the appropriation Act in which it is contained makes provision."

Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund

PROGRAM AND PERFORMANCE

(Dollar amounts in thousands)

Fishermen's Contingency Fund		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Administrative	Pos./BA	1	51	1	50	1	54	1	54	0	0
Expenses	FTE/Obl.	2		2		2		2			
Payment of Claims	Pos./BA		668		684		946		946		0
	FTE/Obl.		667								
Total	Pos./BA	1	719	1	734	1	1,000	1	1,000	0	0
	FTE/Obl.	2	667	2		2		2			

Justification of Program and Performance

Activity: Fishermen's Contingency Fund
Subactivity: Fishermen's Contingency Fund

Goals and Objectives

Goals: Compensate domestic fishermen for damage or loss of fishing gear due to obstructions related to oil or gas exploration, development, and production on the Outer Continental Shelf (OCS).

Objectives: Minimize financial instability of the fishing industry caused by competing uses of the OCS. Provide for timely resolution of claims by vessel owners. Administer the Fund's resources efficiently and effectively.

Base Program

The Fishermen's Contingency Fund is authorized under Section 402 of Title IV of the Outer Continental Shelf Lands Act Amendments of 1978. NOAA compensates U.S. commercial fishermen for damage or loss of fishing gear, and resulting economic loss caused by obstructions related to oil and gas exploration, development, and production in any area of the Outer Continental Shelf. The funds used to provide this compensation are derived from fees collected on an annual basis by the Secretary of the Interior from the holders of leases, exploration permits, easements, or rights-of-way on the OCS.

Funded totally through user fees, disbursements can be made only to the extent authorized in appropriation acts.

Output Performance Measures

	1988 Actual	1989 Estimate	1990 Estimate
Number of claims received	200	200	200
Number of claims processed	175	175	175

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Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	47	47	
11.3	Other than full-time permanent			
11.5	Other personnel compensation			
11.8	Special personnel services payments			
11.9	Total personnel compensation	47	47	
12.1	Civilian personnel Benefits	5	5	
13	Benefits for former personnel			
21	Travel and transportation of persons	2	2	
22	Transportation of things			
23.1	Rental payments to GSA			
23.2	Rental payments to others			
23.3	Commun., util., misc. charges			
24	Printing and reproduction			
25	Other services			
26	Supplies and materials			
31	Equipment			
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities	946	946	
43	Interest and dividends			
44	Refunds			
99	Total, Direct Obligations	1,000	1,000	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,000	1,000	

Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time permanent	2	2	
Other than full-time permanent			
Total	2	2	
Authorized Positions:			
Full-time permanent	1	1	
Other than full-time permanent			
Total	1	1	

Department of Commerce
National Oceanic and Atmospheric Administration
Fisherman's Contingency Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level			
Senior executive service			
General schedule	47	47	
Commissioned officers			
Wage board/wage marine			
Scientific & professional (P.L. 80-313)			
Students			
Subtotal	47	47	
11.3 Other than full-time permanent			
General schedule			
Wage board			
Experts & consultants			
Hourly			
Subtotal			
11.5 Other personnel compensation			
Overtime			
SES performance awards			
Cash awards			
Merit pay awards			
Other			
Subtotal			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
11.8	Special personnel services payments			
	Foreign service officers (State)			
	Other			
	Subtotal			
11.9	Total personnel compensation	47	47	
12.1	Civilian personnel benefits			
	Civil service retirement	4	4	
	Federal employees' retirement			
	Thrift savings plan			
	Federal insurance contribution act			
	Health insurance	1	1	
	Life insurance			
	Employees' compensation fund			
	Other			
	Subtotal	5	5	
13	Benefits for former personnel			
	Severance pay			
	Unemployment compensation			
	Other			
	Subtotal			
21	Travel and transportation of persons			
	Common carrier			
	Mileage			
	Per diem/actual	2	2	
	Vehicular			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
22	Transportation of things			
	[Overseas estimates]			
23.1	Rental payments to GSA			
23.2	Rental payments to others			
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment			
	Rental of office copying equipment			
	Other equipment rental			
	Federal telecommunications system			
	Other telecommunications services			
	Postal Service by USPS			
	Other			
	[Overseas estimates]			
	Subtotal			
24	Printing and reproduction			
	Publications			
	Public use forms			
	Envelopes			
	Other			
	[Payments to GA, WCF]			
	[Overseas estimates]			
	Subtotal			
25	Other services			
	Training:			
	University			
	Office of personnel management			
	Other			

Department of Commerce
National Oceanic and Atmospheric Administration
Fishermen's Contingency Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
	Maintenance of equipment			
	GSA reimbursable services			
	ADP services			
	Telecommunications services			
	Payments to GA, WCF			
	Other non-government contracts			
	Other			
	[Overseas estimates]			
	Subtotal			
26	Supplies and materials			
	Office supplies			
	ADP supplies			
	Other			
	[Overseas estimates]			
	Subtotal			
31	Equipment			
	Office machines and equipment			
	ADP hardware			
	ADP software			
	Other			
	[Overseas estimates]			
	Subtotal			
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities	946	946	0

Department of Commerce
National Oceanic and Atmospheric Administration
Fisherman's Contingency Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
43	Interest and dividends			
44	Refunds			
99	Subtotal, Direct Obligations	1,000	1,000	0
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,000	1,000	0

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Appropriation Summary Statement

Appropriation: Foreign Fishing Observer Fund

The Foreign Fishing Observer Fund was originally established by Public Law 96-339, which amended the Atlantic Tunas Convention Act of 1975. The Fund includes the Observer Program provided for by the Magnuson Fishery Conservation and Management Act, as amended, (P.L. 94-265). Under these laws, U.S. observers are placed aboard foreign fishing vessels fishing within the Exclusive Economic Zone (EEZ) of the United States to monitor compliance with U.S. fishery laws and to collect data for the management of U.S. fisheries. The Fund is financed through fees imposed on owners and operators of the foreign fishing vessels that fish within the EEZ. The Foreign Fishing Observer Fund is to be used by the Secretary of Commerce to pay salaries, administrative costs, and data management costs associated with full observer coverage aboard foreign fishing vessels. In addition, beginning in FY 1985, foreign fishermen were permitted to contract directly with approved contractors to obtain observers.

16 USC 1827 stipulates that the amounts available in the Fund can be disbursed only to the extent and in the amounts provided for in advance in appropriation acts.

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Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
...	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA			15	1,986
		FTE/Obl.			36	
	Sequester Applied, 1990					(23)
	Appropriation Currently available, 1990					1,963
NOAA-304	FY 1991 Adjustments to base:					
	Transfers			0		
	Adjustment for 1990 pay increase and related costs			28		
	Other Cost Changes			6		
	Subtotal, adjustments to base:				0	34
	1991 Base	Pos./BA			15	1,997
		FTE/Obl.			0	

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NOAA-306	Foreign Fishing Observer Observer Fund	Pos./BA	5	1,642	15	1,963	15	1,997	15	1,997	0	0
		FTE/Obl.	18	1,711	36	2,594	36		36			
	TOTAL	Pos./BA	5	1,642	15	1,963	15	1,997	15	1,997	0	0
		FTE/Obl.	18	1,711	36	2,594	36		36			

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Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	
Total Obligations	1,711	2,594	1,997	1,997	
Financing:					
Offsetting collections from:					
Federal funds					
Trust funds					
Non-federal sources					
Recoveries					
Unobligated balance, start of year	(700)	(631)			
Unobligated balance transferred					
Unobligated balance, end of year	631				
Unobligated balance lapsing					
Budget Authority	1,642	1,963	1,997	1,997	
Transferred to /from other accounts					
Sequester		23			
Appropriation	1,642	1,986	1,997	1,997	

Justification of Adjustments to Base and Built-in Changes
(Dollars amounts in thousands)

Appropriation: Foreign Fishing Observer Fund

	Pos.	Amount
Adjustment for 1990 pay increase and related cost:		
Total cost in 1990 of pay increase		21
Less amount absorbed		-21
Anticipated 1990 pay increase supplemental		0
Amount in 1991 to provide full-year cost of pay increase		28
Less amount absorbed		- 0
Subtotal, adjustment in 1990 pay increase		28

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, NOAA is absorbing the full cost of this pay increase.

	Pos.	Amount
Adjustment for 1991 pay increases and related costs:		
Total cost in 1991 of general pay increase		22
Less amount absorbed		-16
Subtotal, adjustment for 1991 general pay increase		6
Total cost in 1991 of SES pay increase		0
Less amount absorbed		0
Subtotal, adjustment for 1991 SES increase		0
Total adjustment for 1991 pay increases		6

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. Seventy-five percent of the 1991 costs of that increase will be absorbed.

Appropriation Language and Code Citations:

For expenses necessary to carry out the provisions of the Atlantic Tunas Convention Act of 1975, as amended, (Public Law 96-339), the Magnuson Fishery Conservation and Management Act of 1976, as amended, (Public Law 94-265 and P.L. 97-453) and the American Fisheries Promotion Act, (Public Law 96-561), there are monies appropriated from the fees imposed under the Foreign Fishing Observer Program authorized by these Acts, not to exceed $2,000,000, to remain available until expended.

16 USC 1824(b)(10)

"Reasonable fees shall be paid to the Secretary by the owner or operator of any foreign fishing vessel for which a permit is issued.."

16 USC 1827

16 USC 1827 authorizes the Secretary to establish a program under which a U.S. observer will be stationed aboard each foreign fishing vessel while that vessel is in waters within the fishery conservation zone [equivalent to the exclusive economic zone (EEZ)] established under section 101 of the Act of 1976, and the convention area as defined in Article I of the International Convention for the Conservation of Atlantic Tuna; and is taking or attempting to take any species of fish if such taking or attempting to take may result in the incidental taking of billfish. 16 USC 1827 also establishes the Foreign Fishing Observer Fund in the Treasury of the United States and provides that payments made by the Secretary to carry out this section be paid from the fund only to the extent and amounts provided for in advance in appropriation acts.

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
Subactivity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Foreign Fishing Observer Fund	Pos./BA	5	1,642	15	1,963	15	1,997	15	1,997	0	0
	FTE/Obl.	18	1,711	36	2,394	36		36			

Justification of Program and Performance

Activity: Foreign Fishing Observer Fund
Subactivity: Foreign Fishing Observer Fund

Goals and Objectives

Goals: Provide 100 percent observer coverage aboard foreign fishing vessels fishing within the United States' EEZ. Increase compliance with fishery regulations and requirements. Support balanced conservation and management measures to achieve and maintain the optimum use of our living marine resources.

Objectives: Collect data to determine foreign compliance with fishery regulations and the status of fish stocks within the EEZ of the United States. Administer the base and supplemental observer programs in a cost-effective, efficient manner.

Base Program

The Foreign Fishing Observer Fund was authorized by Public Law 96-339, which amended the Atlantic Tuna Convention Act of 1975, and the American Fisheries Promotion Act of 1980, (Public Law 96-561), which amended the Magnuson Fishery Conservation and Management Act (MFCMA). The fund is financed through fees collected from foreign governments with fishing vessels fishing within the exclusive fishery jurisdiction of the United States. The fund is used by NOAA to pay salaries, administrative costs, data editing and entry costs, and other costs incurred in placing observers aboard foreign fishing vessels. This includes long-line vessels fishing in the Atlantic billfish and shark fishery and other foreign fishing vessels fishing within the EEZ of the United States. Such fishing requires a permit issued under the MFCMA. The observer program is conducted primarily through contracts with the private sector. NOAA places these observers aboard foreign fishing vessels to collect scientific information and to monitor compliance with the fishery management measures. Amounts available in the Fund can be disbursed only to the extent and in amounts provided for in advance in appropriation acts.

Beginning in FY 1985, Congress approved the establishment of a supplemental observer program. The program provided that foreign vessels without Federally-funded observers will be required to obtain the services of private individuals certified by the Secretary of Commerce.

Output Performance Measures

	1989 Actual	1990 Estimate	1991 Estimate
Percent observer coverage of foreign fishing within the U.S. EEZ as required by the:			
- Atlantic Tuna Convention Act	100	100	100
- American Fisheries Promotion Act	100	100	100

NOTE: This performance data represents the combined impact of appropriated funds and direct contracting by foreign governments.

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Department of Commerce

National Oceanic and Atmospheric Administration

Foreign Fishing Observer Fund

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollars in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	755	755	
11.3	Other than full-time permanent			
11.5	Other personnel compensation			
11.8	Special personnel services payments			
11.9	Total personnel compensation	755	755	
12.1	Civilian personnel Benefits	120	120	
13	Benefits for former personnel			
21	Travel and transportation of persons	20	20	
22	Transportation of things			
23.1	Rental payments to GSA			
23.2	Rental payments to others	25	25	
23.3	Commun., util., misc. charges			
24	Printing and reproduction	4	4	
25	Other services	1,035	1,035	
26	Supplies and materials	34	34	
31	Equipment	4	4	
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities			
43	Interest and dividends			
44	Refunds			
99	Total, Direct Obligations	1,997	1,997	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,997	1,997	

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time permanent	36	36	
Other than full-time permanent			
Total	36	36	
Authorized Positions:			
Full-time permanent	15	15	
Other than full-time permanent			
Total	15	15	

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level			
Senior executive service			
General schedule	755	755	
Commissioned officers			
Wage board/wage marine			
Scientific & professional (P.L. 80-313)			
Students			
Subtotal	755	755	
11.3 Other than full-time permanent			
General schedule			
Wage board			
Experts & consultants			
Hourly			
Subtotal			
11.5 Other personnel compensation			
Overtime			
SES performance awards			
Cash awards			
Merit pay awards			
Other			
Subtotal			

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
11.8	Special personnel services payments			
	Foreign service officers (State)			
	Other			
	Subtotal			
11.9	Total personnel compensation	755	755	
12.1	Civilian personnel benefits			
	Civil service retirement	26	26	
	Federal employees' retirement			
	Thrift savings plan			
	Federal insurance contribution act	68	68	
	Health insurance	22	22	
	Life insurance	4	4	
	Employees' compensation fund			
	Other			
	Subtotal	120	120	
13	Benefits for former personnel			
	Severance pay			
	Unemployment compensation			
	Other			
	Subtotal			
21	Travel and transportation of persons			
	Common carrier	7	7	
	Mileage	7	7	
	Per diem/actual	6	6	
	Vehicular			

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
22	Transportation of things			
	[Overseas estimates]			
23.1	Rental payments to GSA			
23.2	Rental payments to others	25	25	
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment			
	Rental of office copying equipment			
	Other equipment rental			
	Federal telecommunications system			
	Other telecommunications services			
	Postal Service by USPS			
	Other			
	[Overseas estimates]			
	Subtotal			
24	Printing and reproduction			
	Publications			
	Public use forms			
	Envelopes			
	Other	4	4	
	[Payments to GA, WCF]			
	[Overseas estimates]			
	Subtotal	4	4	
25	Other services			
	Training:			
	University			
	Office of personnel management			
	Other	20	20	

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
	Maintenance of equipment	5	5	
	GSA reimbursable services			
	ADP services			
	Telecommunications services			
	Payments to GA, WCF			
	Other non-government contracts			
	Other	1,010	1,010	
	(Overseas estimates)			
	Subtotal	1,035	1,035	
26	Supplies and materials			
	Office supplies	5	5	
	ADP supplies			
	Other	29	29	
	(Overseas estimates)			
	Subtotal	34	34	
31	Equipment			
	Office machines and equipment			
	ADP hardware			
	ADP software			
	Other	4	4	
	(Overseas estimates)			
	Subtotal	4	4	
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities			

Department of Commerce
National Oceanic and Atmospheric Administration
Foreign Fishing Observer Fund
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
43	Interest and dividends			
44	Refunds			
99	Subtotal, Direct Obligations	1,997	1,997	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	1,997	1,997	

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Department of Commerce
National Oceanic and Atmospheric Administration
Aviation Weather Services Program Trust Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
NOAA-319	Summary of adjustments to base:					
	Appropriation enacted, 1990	Pos./BA				30,000
	Sequester applied, 1990	FTE/Obl.				(417)
	Appropriation currently available, 1990					29,583
	FY 1991 Adjustments to base:					
	Transfers					
NOAA-320	Adjustment for 1990 pay increase and related costs					
	Other cost changes					
	Subtotal, adjustments to base:					4,938
	1991 Base	Pos./BA FTE/Obl.			0	34,521

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Aviation Weather Services Program	Pos./BA	0	28,717	0	29,583	0	34,521	0	34,521	0	0
TOTAL	Pos./BA	0	28,717	0	29,583	0	34,521	0	34,521	0	0

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Justification of Adjustments to Base and Built-in Changes

(Dollar amounts in thousands)

	Perm. Pos.	Amount
Other Increases:		
Air carrier services	0	+$4,938

In FY 1991, the Administration is requesting and increase of $4,938,000 (object class 25.0) to fund Aviation Weather Services. Of this amount, $4,074,000 has been directly offset by a reduction in ORF direct obligations. To maintain a constant level of Aviation Weather Services, NOAA has used ORF funds to pay for inflationary cost increases for which funds were not appropriated out of the Trust Fund. The requested increase to the Trust Fund appropriation and corresponding decrease to ORF will realign costs between these two accounts to more accurately reflect each program costs. The remainder ($864,000) represents an increase for pay and other cost charges (personnel shown in ORF reimbursables).

Department of Commerce
National Oceanic and Atmospheric Administration
Aviation Weather Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
Subactivity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Aviation Weather Services	Pos./BA	0	28,717	0	29,583	0	34,521	0	34,521	0	0
Total	Pos./BA	0	28,717	0	29,583	0	34,521	0	34,521	0	0

Justification of Program and Performance

Activity: Aviation Weather Services Program Trust Fund
Subactivity: Operations and Research

Goals and Objectives

Goals: To furnish weather information for safe, efficient aircraft operations and management of the National Airspace System as recommended by the Department of Transportation's Federal Aviation Administration (FAA) under provisions of the Federal Aviation Act of 1958 and in accordance with International Civil Aviation Organization agreements.

Objectives: To provide required forecasts for airports and en route aviation operations.

Base Program

- The NWS provides a broad range of services in support of the aviation community. Fifty-two Weather Service Forecast Offices (WSFOs) prepare site specific airport terminal forecasts three times per day with amendments as needed for over 500 public use airports in the 50 states and in the Caribbean. These offices also produce about 300 individual route-oriented forecasts three times per day for the 48 contiguous states. Weather Service Offices (WSOs) also take observations to meet local aviation requirements.
- The National Aviation Weather Advisory Unit, a dedicated aviation unit within the National Severe Storms Forecast Center (NSSFC), prepares Area Forecasts three times daily describing general aviation weather conditions over the lower 48 states. This unit also issues in-flight advisories of hazardous weather conditions associated with thunderstorms, icing turbulence, strong low-level winds, and broad areas of low clouds and/or restricted visibility. In Alaska and Hawaii, these products are issued by WSFOs.

Department of Commerce
National Oceanic and Atmospheric Administration
Aviation Weather Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollars in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
11.3	Other than full-time permanent			
11.5	Other personnel compensation			
11.8	Special personnel services payments			
11.9	Total personnel compensation			
12.1	Civilian personnel Benefits			
13	Benefits for former personnel			
21	Travel and transportation of persons			
22	Transportation of things			
23.1	Rental payments to GSA			
23.2	Rental payments to others			
23.3	Commun., util., misc. charges			
24	Printing and reproduction			
25	Other services	34,521	34,521	
26	Supplies and materials			
31	Equipment			
32	Lands and structures			
33	Investments and loans			
41	Grants, subsidies and contributions			
42	Insurance claims and indemnities			
43	Interest and dividends			
44	Refunds			
99	Total, Direct Obligations	34,521	34,521	
	Reimbursable Obligations			
	TOTAL OBLIGATIONS	34,521	34,521	

Mr. Smith. Testifying in support of the request we have Under Secretary John Knauss. Since this is your first appearance, I will insert your biographical sketch in the record.

[The information follows:]

BIOGRAPHY

JOHN A. KNAUSS

UNDER SECRETARY FOR OCEANS AND ATMOSPHERE, AND ADMINISTRATOR OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

John A. Knauss, under secretary for oceans and atmosphere and administrator of the Department's National Oceanic and Atmospheric Administration (NOAA), took office August 7, 1989.

A noted oceanographer and educator, Knauss was a professor of oceanography at the Graduate School of Oceanography at the University of Rhode Island (URI). He also served as dean of the URI Graduate School of Oceanography from 1962 to 1987, and as the university's provost for marine affairs from 1969 to 1982.

Knauss has been a member of two presidential commissions on marine affairs: the Commission on Marine Science, Resources, and Engineering (the Stratton Commission) in 1967 to 1968 and the National Advisory Committee on Oceans and Atmosphere (NACOA), 1978 to 1985. He served as chairman of NACOA from 1981 to 1985. He has been president of the Association of Sea Grant Program Institutions, chairman of the Ocean Science Committee of the National Academy of Sciences/National Research Council, and chairman of the Marine Division of the National Association of State Universities and Land-Grant Colleges.

He has served as president of the oceanographic section of the American Geophysical Union (AGU), vice president of the Marine Technology Society (MTS), vice chairman of the American Association for the Advancement of Science's (AAAS) Atmospheric and Hydrospheric Sciences Section, and as council member of the American Meteorological Society. He was a co-founder of the Law of the Sea Institute and served on its governing board from 1965 to 1976 and 1981 to 1987. He has been elected a fellow of the AAAS, the AGU, and the MTS.

Knauss graduated from Massachusetts Institute of Technology (B.S., 1946), the University of Michigan (M.S., 1949), and the University of California, Scripps Institution of Oceanography (Ph.D., 1959).

November 1989

Opening Statement

Mr. Smith. Do you have a statement?

Dr. Knauss. Yes, sir.

Mr. Smith. Do you want to summarize it or have it put in the record?

Dr. Knauss. Summarize and have the full statement put in the record.

Mr. Smith. All right.

Dr. Knauss. It is a pleasure to be here. On behalf of the President, I note that we requested approximately $1.4 billion for NOAA including $34.5 million which is proposed for transfer from the Airport and Airways Trust Fund, sir.

Mr. Smith. How much?

Dr. Knauss. $34.5 million is the proposed transfer from the Airport And Airways Trust Fund, sir.

I take pleasure and pride in presenting NOAA's fiscal year 1991 budget request. As you noted, it is the first budget that I have had an opportunity to present to you. I believe this budget demonstrates the strong support NOAA received from Secretary Mosbacher and from President Bush.

Our fiscal year 1991 request represents an increase of about 34 percent over the 1990 request. And as you have already noted, it is an increase of nearly 9 percent over our current funding level. It demonstrates the administration's commitment to understanding, protecting and preserving our environment. It enables NOAA to maintain its position as what I have been calling this nation's earth systems agency.

We are asking for increases over the current funding level in three initiatives: climate and global change; modernization of the National Weather Service; and our Coastal Ocean Science Program.

In addition, this budget proposal moves much closer, I believe, to addressing most of the concerns and priorities that Congress has made evident in the past. For example, we have included funds for the National Sea Grant College Program and the Coastal Zone Management Program as well as substantial increases in the budget for our fisheries programs. For the first time, we have a $2.5 million base program for damage assessment in oil spill and chemical contamination episodes. As always, however, the realities of deficit reduction have forced some hard choices. But given the difficult fiscal problems, I believe this budget truly reflects a careful approach to addressing the truly national needs of our nation.

As I noted, Mr. Chairman, I would like to submit the full testimony for the record. We are proposing significant funding increases in fiscal year 1991 for two major NOAA-wide initiatives—programs that cut across line organizations within NOAA.

CLIMATE AND GLOBAL CHANGE

The first is climate and global change. NOAA's request for our contribution to that program is $87 million. That is an increase of $69 million over the FY 1990 funding level.

NOAA is a vital complement to the U.S. effort as a whole. We have unique talents and special capabilities to bring to bear on some of the highest priorities identified by the Committee on Earth Sciences, the group that coordinates the overall effort. Our fiscal year 1991 budget will allow us to expand our limited understanding of greenhouse warming, ozone depletion, water resources and year-to-year climate change.

I would like to emphasize, Mr. Chairman, that in addressing the long-term and very critical concerns of global warming, I believe that the knowledge we gain from the research will provide several useful products within a very few years. As our ability to forecast longer time scales improves, the economic benefits to the nation improves dramatically.

For example, I believe it is possible within three to five years to provide seasonal climate forecasts in the 30 to 90-day average range for atmospheric conditions in selected regions of the world, including North America, that will be significantly better than what we can presently do. I am hopeful that within eight to ten years it will be possible to begin useful predictions of year-to-year variations in climate over large portions of the world.

These kinds of reliable seasonal interannual weather forecasts are of tremendous economic importance. If, for example, we can predict severe drought conditions we can prepare for it. We can more effectively compensate for reductions in food stocks. If we can predict unusually cold winters, we can prepare for it. We can arrange for adequate fuel oil supplies.

Several charts that detail the kinds of projects NOAA will undertake in fiscal year 1991 to meet these objectives are attached to the full testimony.

COASTAL OCEAN SCIENCE PROGRAM

The second program is the continuation of our coordinated Coastal Ocean Science Program that we have just begun in FY 1990. Our budget requests $17.4 million for this program. It is an increase of $11 million over current funding levels. The Coastal Ocean Science Program is designed to improve our understanding of environmental issues affecting the quality of our coastal waters. Our goal is to better understand the detailed reasons for our deteriorating coastal environment so that we can provide improved and meaningful data and information for policy decisions at all levels of government; state, local and federal.

I am particularly pleased that for the first time in many years NOAA's budget request includes funds for Coastal Zone Management and the National Sea Grant College Program. We will be testifying soon in support of a reauthorization of the Coastal Zone Management account, which we have restructured as a coordinated national effort designed to maintain a balance between resources protection and coast-related marine activity. Our budget requests $30 million for grants under this program.

In addition, the Sea Grant Program proposed to be funded at $27 million will support many of NOAA's marine-related activities, one of which is our Coastal Oceans Program. I welcome the contribution made by these programs that have been zeroed out in previous administration budgets and restored by Congress. They are valuable both as stand-alone programs and as important components to our high-priority NOAA-wide initiative.

NATIONAL WEATHER SERVICE MODERNIZATION

Continuation of the National Weather Service modernization is another highlight in our budget request. I would like to emphasize that our request contains sufficient funds to maintain existing operations at all weather offices in FY 1991. The budget requests $76 million over current funding levels of about $100 million for the systems necessary to implement the very important modernization program that is now under way.

Keeping the modernization of our National Weather Service on schedule is one of my highest priorities. These state-of-the-art systems we are acquiring will enable us to predict, with increased accuracy, weather conditions across the United States. Improved predictions of severe weather such as tornadoes will dramatically improve our ability to respond to the safety and economic impact of these severe natural events.

Finally, sir, I would like to mention several other key aspects of NOAA's FY 1991 budget. Our Fisheries budget addresses legislative mandates in the area of marine mammal protection. We also propose to begin addressing long-deferred infrastructure problems.

Thank you, Mr. Chairman. I have Dr. Rodney Weiher, sitting at the table with me, our NOAA comptroller. Directly behind us are senior members of our staff who are prepared to address any specific questions you might have, sir.

[The statement of Dr. Knauss follows:]

STATEMENT BY THE UNDERSECRETARY
FOR OCEANS AND ATMOSPHERE
U.S. DEPARTMENT OF COMMERCE

JOHN A. KNAUSS

BEFORE THE HOUSE APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE,
JUSTICE, AND STATE, THE JUDICIARY
AND RELATED AGENCIES

March 2, 1990

Mr. Chairman and members of the Committee, I am pleased to appear before you today in support of the FY 1991 budget request for the National Oceanic and Atmospheric Administration (NOAA). NOAA is requesting total budget authority of $1,422,084,000 which includes $34,521,000 proposed for transfer from the Airport and Airways Trust Fund.

I take particular pride and pleasure in presenting NOAA's FY 1991 budget request to you today. In contrast to budget proposals of the recent past, this request has a very exciting story to tell. Our FY 1991 request represents an increase of about 34% over the 1990 request, and is an increase of nearly 9% over our current funding level. Our budget proposal is consistent with President Bush's desire to be the "environmental President" and his commitment to understanding, protecting, and preserving our environment, and enables NOAA to maintain its current position as, in my opinion, the earth systems agency.

This budget proposal has been thoughtfully designed to reflect a rational, organized approach to funding important national programs and meeting critical national goals. We are requesting increases over the current funding level in our three highest-priority initiatives: that is, Climate and Global Change, modernization of the National Weather Service, and our Coastal Ocean Science program. In addition, although our proposal differs from the FY 1990 appropriation in some respects, I believe our budget proposal moves much closer to addressing many Congressional concerns and priorities that have been evident in the past. For example, we have included funds for the National Sea Grant College Program and the Coastal Zone Management grants in our proposal. We have proposed a budget for our Fisheries programs that represents a substantial increase over prior requests.

As always, however, the realities of deficit reduction force us to make the hard choices necessary to address what are truly the needs of our nation today. I believe this budget reflects this crucial balance. Let me share with you the highlights of our 1991 budget request.

The request funds essential ongoing programs and activities and program increases in our high-priority areas. As I mentioned, our proposal places a high priority on active participation in the U.S. Global Change Research Program; continues emphasis on our Coastal Ocean Science program; and continues our ongoing program of modernization of the National Weather Service. I would like to discuss some of the details of these important programs, starting with the President's climate and global change research program.

NOAA's request for our contribution to the U.S. Global Change Research Program (USGCRP) is $87 million, an increase of $69 million over current funding levels. NOAA's Climate and Global Change Program is a vital component of the U.S. effort and enables us to bring our unique talents and special capabilities to bear on some of the highest priorities identified by the Committee on Earth Sciences in the USGCRP Research Plan. Consistent with CES priorities, NOAA has chosen to focus on those changes in the Earth's climate system that confront us with major economic, social, and environmental challenges. Our FY 1991 budget emphasizes the need to improve our presently limited understanding of processes such as greenhouse warming, ozone depletion, regional drought, water resources and year-to-year climate change.

The commitment to establish the aggressive scientific program outlined by the CES agencies is a significant policy decision recognizing the need to improve our understanding of the Earth system, reduce major scientific uncertainties in the decision process, and continually re-evaluate the effectiveness of policy in the light of new scientific insight. NOAA will work with other agencies and the scientific community, to synthesize authoritative information on global change in a form useful to decision-makers. NOAA's mission and expertise have led us to assume responsibility as a principal operational climate prediction and information service agency in the National Program.

It might be helpful if I outlined some of the important new prediction services which we expect to derive from the program. In so doing, I would like to call to your attention the fact that useful products will become available from NOAA's program within a very few years. As our ability to forecast on longer time scales improves, the economic benefits to the nation improve dramatically. For example,

- It will be possible within three to five years, we believe, to provide seasonal climate forecasts--that is, forecasts of 30 to 90 day average atmospheric conditions--for selected regions, including North America.

- Within eight to ten years, it will be possible to begin routine predictions of year-to-year variations in climate over large portions of the world, including North America. These six-month to one-year forecasts will be based on a greatly improved understanding of how the tropical ocean induces changes in global climate patterns.

- Although the challenge of modelling the Earth system on decadal timescales is an inherently long-term effort, the Program outlined by CES will begin to narrow some of the significant scientific uncertainties very soon. NOAA will play a major role in these long-term efforts.

Our FY 1991 proposal will allow us to contribute to three major USGCRP objectives: documenting global change, focused process studies, and climate modelling and prediction. The attached charts, which I would like to submit for the record, summarize our climate prediction efforts and detail the types of projects NOAA will undertake in FY 1991 to meet the USGCRP objectives.

Another high-priority request in 1991 is the continuation of our coordinated coastal ocean science program initiated in 1990. Our budget requests $17.4 million for this program, an increase of $11 million over current funding levels.

As you know, the coastal ocean program is designed to improve our understanding of the environmental issues affecting the quality of our coastal waters and improved data for policy decisions at all levels. In FY 1991, the Coastal Ocean Program will focus its efforts in five areas: Nutrient-Enhanced Productivity; Estuarine Habitats; Coastal Fisheries Ecosystems; Toxic Chemical Contamination; and Physical Impacts. I would like to describe each of these elements briefly.

Nutrient-Enhanced Productivity results from the accumulation of algae-producing materials such as nitrogen and phosphorus in our Nation's water bodies. This accumulation of excessive algae reduces the oxygen needed to sustain fisheries and other organisms in the marine food chain. Our FY 1991 program will focus on assessment of the extent of this problem, research and modelling in the Gulf of Mexico and the Southeast, and evaluation of the effects of atmospheric nitrogen in the East Coast estuaries.

Second, expanding our **Estuarine Habitats** efforts will contribute to the President's goal of "no net wetland loss". Expanded wetlands mapping from satellites, habitat research, modelling, and evaluation of wetland restoration techniques will improve our abilities to meet this important National priority.

Third, we will expand our **Coastal Fisheries Ecosystems** efforts, with the goal of developing more accurate and reliable fisheries models which leads to more effective fisheries management plans. In recent years, the demand for seafood has risen dramatically, and there are no major new fisheries to develop. Therefore, effective fisheries management plans, based on models which take into account natural variability, are critical, especially as the emphasis on fish as an important and healthful protein source continues to increase. Both human activities and natural changes in the coastal ocean environment affect fisheries dynamics and populations. These must be recognized as we develop more accurate and efficient fishery management plans. In the past, we have applied this ecosystem approach to one of the largest fisheries in the world, the Bering Sea Pollock fishery, which is now an important resource valued at at least one billion dollars per year.

Fourth, we will continue ongoing assessments of highly polluted marine environments. Our **Toxic Chemical Contamination** efforts are designed to provide the information necessary for informed decision-making to safeguard our Nation's marine resources. In FY 1991, we will emphasize understanding the effects of toxic chemicals on estuarine habitats and their living resources.

Fifth, we will expand our efforts in **Physical Impacts**. This element of the Coastal Ocean Program focuses on improving predictions of tsunami and hurricane flooding, thereby reducing hazards to coastal resources. In FY 1991, we will upgrade the tsunami measurement system in Alaska and enhance efforts in hurricane flooding prediction.

Finally, much of the research and assessment needed to address coastal ocean problems relies on similar basic ocean data. We will enhance our ocean observation, communication, and data and information management and delivery systems to facilitate efficient provision of these data to decision-makers. The attached charts, which I would like to submit for the record, summarizes our FY 1991 Coastal Ocean Program.

Other NOAA programs will contribute to the Coastal Ocean Science program as well. For the first time in many years, NOAA's budget request includes funds for Coastal Zone Management Act grants and the National Sea Grant College Program. We will be testifying soon in support of the reauthorization of the Coastal Zone Management Act, which we have restructured as a coordinated national effort designed to maintain a balance between resource protection and coastal-related marine activity. Our budget requests $30 million for grants under this program. In addition, the Sea Grant Program, proposed to be funded at $27 million, will support many of NOAA's marine-related activities, one of which is our coastal ocean program. I welcome the contribution made by these programs, as both stand-alone programs and as important components of our high-priority initiatives.

The final highlight in our budget request is the continuation of the National Weather Service modernization. I am pleased to assure you that our request contains sufficient funds to maintain existing operations at all weather offices in 1991. The budget requests $76 million over current funding levels for the systems necessary to implement the modernization.

Keeping the modernization of the National Weather Service on schedule is one of my highest priorities. The state-of-the-art systems we are acquiring will enable us to predict, with increased accuracy, weather conditions in the United States. Improved prediction of severe weather such as tornadoes and thunderstorms will dramatically improve our ability to inform the public allowing timely response to the safety and economic impacts of these severe natural events.

The 1991 budget requests a $43 million increase for Next Generation Rador **(NEXRAD)**. By October 1991, eleven of these enhanced doppler radars will be delivered. Secondly, the budget requests a $5 million increase for the **Automation of Service Observations (ASOS) Program**, to continue the full-scale production contract which will be awarded in August 1990.

Thirdly, the budget requests a $21 million increase for the **Advanced Weather Interactive Processing System (AWIPS)**. **AWIPS** will allow us to proceed with technology development and prototype deployment at the Modernization and Associated Restructuring Demonstration (MARD) sites. Finally, the budget requests a $7 million increase for **NOAAPORT** to initiate GOES data remapping and data communications capability.

In addition, the budget contains an increase of $11 million for the **Modernization and Associated Restructuring Demonstration and Implementation (MARDI)**. This is a key element of the modernization program, as it will demonstrate the new technology and service improvements, provide professional development for NWS Staff and implement the service improvements nationwide.

The attached chart summarizes our NWS modernization output for Fiscal Year 1990 and 1991.

This budget provides funding associated with the annual cost of procuring spacecraft, launches, and associated ground systems for the polar and geostationary orbiting environmental satellites. Funds are also requested to complete and launch LANDSAT 6.

With new FY 1990 resources, NOAA is building a small interdisciplinary damage assessment team to respond to major incidents that harm its public trust resources, including national marine sanctuaries, fisheries, and marine mammals. This team will assess damages, support NOAA damage claims against responsible parties, and plan and implement restoration of damaged habitats.

Finally, I would like to mention very briefly several other key aspects of NOAA's 1991 budget proposal. Our Fisheries budget is responsive to key problems in fisheries data collection and management, and addresses critical legislative mandates in the areas of marine mammal protection and Driftnet Act compliance. We propose to address infrastructure problems through a NOAA-wide facilities maintenance program, and by making improvements in our fleet of ships and aircraft.

Thank you Mr. Chairman, I am excited and enthusiastic about this budget request, my first as Administrator of NOAA. I hope that you and this Committee will share my enthusiasm and I look forward to working with you as we proceed in this process. I would be happy to address any questions which you or other members of the Committee might have regarding our budget request. I also have with me today Rodney Weiher, NOAA Comptroller, and other senior members of my staff to address specific issues and questions.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
1991 CONTRIBUTION TO USGCRP

DOCUMENTING GLOBAL CHANGE

- OPERATIONAL OCEAN OBSERVATION
- GLOBAL SEA LEVEL
- STRATOSPHERIC OZONE
- DATA AND INFORMATION MANAGEMENT SYSTEM

FOCUSED PROCESS STUDIES

- ROLE OF OCEAN IN CLIMATE CHANGE
- SOURCES, SINKS, BEHAVIOR OF GREENHOUSE GASSES
- CLOUDS, WATER VAPOR AND HYDROLOGICAL CYCLE
- ECOSYSTEM RESPONSE, CLIMATE AND RELATED STREESSES

CLIMATE MODELLING AND PREDICTION

- OPERATIONAL OCEAN MODELLING
- NEAR-TERM FORECASTING
- LONGER-TERM CLIMATE PREDICTION

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
FY 1991 CLIMATE AND GLOBAL CHANGE PROGRAM

ANTICIPATED CLIMATE PREDICTION PRODUCTS

TIME SCALE	PRODUCT
WEATHER	FORECAST PREPARED EVERY SIX HOURS
SEASONAL FORECASTS	30-90 DAY PROJECTED MEANS PROVIDED BI-WEEKLY
INTERANNUAL PREDICTION	SIX MONTH FORECASTS AND ONE YEAR PROGNOSIS PROVIDED QUARTERLY
DECADAL TO CENTENNIAL	CONSENSUS ASSESSMENTS AND INTERPRETED MODEL PROJECTIONS PROVIDED EVERY FEW YEARS; SPECIAL REPORTS AS PROGRESS ALLOWS

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
COASTAL OCEAN PROGRAM - FY 1991 EMPHASIS

- STUDY EFFECTS OF NUTRIENT OVERENRICHMENT ON FISHERIES AND OTHER ORGANISMS IN THE MARINE FOOD CHAIN
- CONTRIBUTE TO PRESIDENT'S "NO-NET WETLAND LOSS" POLICY THROUGH WORK ON ESTUARINE HABITATS
- DEVELOP MORE RELIABLE FISHERIES MODELS, DATA, AND MANAGEMENT THROUGH WORK IN COASTAL FISHERIES ECOSYSTEMS
- ASSESS HIGHLY POLLUTED MARINE ENVIRONMENTS THROUGH WORK IN TOXIC CHEMICAL CONTAMINATION
- EXPAND PHYSICAL IMPACTS WORK (TSUNAMIS AND STORM SURGES)
- DEVELOP COMMON DATA SETS
- IMPROVE METHODS FOR DELIVERING DATA AND INFORMATION TO COASTAL DECISION-MAKERS AND RESEARCHERS

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE MODERNIZATION OUTPUTS

NEXT GENERATION WEATHER RADAR (NEXRAD)

FY 1990-1991 TRI-AGENCY DELIVERY SCHEDULE:

OKLAHOMA CITY (TWIN LAKES), OK
MELBOURNE, FL
WASHINGTON (STERLING, VA)
WASHINGTON (CLINTON, MD)
KANSAS CITY, MO (NWS TRAINING)
FREDERICK, OK
CHICAGO, IL
N. W. FLORDIA, FL
KEESLER AFB, AL
ST. LOUIS, MO
K.C. BANNISTER MAINTENANCE DEPOT

AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)

FY 1990-1991 TRI-AGENCY LIMITED PRODUCTION DELIVERY SCHEDULE:

16	NATIONAL WEATHER SERVICE
38	FEDERAL AVIATION ADMINISTRATION
1	NAVY

FY 1991 TRI-AGENCY FULL PRODUCTION DELIVERY SCHEDULE:

20	NATIONAL WEATHER SERVICE
55	FEDERAL AVIATION ADMINISTRATION
3	NAVY

ADVANCE WEATHER INTERACTIVE PROCESSING SYSTEM (AWIPS)/ NOAAPORT

FY 1991 AWIPS/NOAAPORT PROGRAM PLANS:

- AWARD DEVELOPMENT, DEPLOYMENT AND OPERATIONS CONTRACT
- CONTINUE SOFTWARE DEVELOPMENT
- AWIPS PROTOTYPE DEVELOPMENT FOR MARD SITES
- INITIATE GOES DATA REMAPPING

CENTRAL COMPUTER FACILITY UPGRADES

DELIVER CLASS VII COMPUTER TO THE NATIONAL METEROLOGICAL CENTER IN FEBRUARY 1990

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
Comparison of 1990 Appropriation to Date with Initial 1991 Requests
to the Secretary, OMB, and the Congress
(Dollar amounts in thousands)

	1990 Appropriation to Date			1991						
				Request to Secretary		Request to OMB		Request to Congress		
Comparison by activity:	Perm. Pos.	FTE	Amount	FTE	Amount	FTE	Amount	Perm. Pos.	FTE	Amount
OPERATIONS, RESEARCH, AND FACILITIES										
National Ocean Service:										
Mapping, Charting, and Geodesy....	511	528	47,887	555	48,124	555	46,374	511	528	46,934
Observation and Assessment........	332	339	41,894	412	100,143	398	66,098	329	336	51,418
Ocean and Coastal Management......	80	83	47,430	100	13,230	76	9,530	80	83	41,194
Subtotal, National Ocean Service:	923	950	137,211	1,067	161,497	1,029	122,002	920	947	139,546
National Marine Fisheries Service:										
Information Collection and Analyses........................	1,277	1,346	104,171	1,355	111,013	1,341	99,497	1,295	1,355	98,288
Conservation and Management Operations......................	474	498	60,390	462	46,445	478	46,445	474	498	48,976
State and Industry Assistance Programs........................	196	205	18,469	224	48,921	177	37,557	121	130	5,894
Subtotal, National Marine Fisheries Service:	1,947	2,049	183,030	2,041	206,379	1,996	183,499	1,890	1,983	153,158

Comparison by activity:	1990 Appropriation to Date Perm. Pos.	 FTE	 Amount	Request to Secretary FTE	 Amount	Request to OMB FTE	 Amount	Request to Congress Perm. Pos.	 FTE	 Amount
Oceanic and Atmospheric Research:										
Climate and Air Quality Research..	281	315	53,856	307	143,324	367	142,234	312	337	118,672
Atmospheric Programs.............	371	359	43,774	413	51,861	393	43,261	381	367	41,799
Ocean and Great Lakes Programs....	221	214	74,864	204	49,801	219	47,001	211	206	39,030
Subtotal, Oceanic and Atmospheric Research:	873	888	172,494	924	244,986	979	232,496	904	910	199,501
National Weather Service:										
Operations and Research...........	3,334	3,688	287,091	3,601	310,055	3,594	292,976	3,263	3,623	292,556
Systems Acquisition...............	39	119	101,425	92	201,617	92	206,552	39	119	177,467
Subtotal, National Weather Service:	3,373	3,807	388,516	3,693	511,672	3,686	499,528	3,302	3,742	470,023
National Environmental Satellite, Data, and Information Service:										
Satellite Observing Systems.......	486	467	242,998	445	338,033	458	317,681	478	459	258,256
Environmental Data Management Systems..........................	372	325	21,536	288	21,536	318	21,736	372	325	22,174
Subtotal, National Environmental Satellite, Data, and Information Service:	858	792	264,534	733	359,569	776	339,417	850	784	280,430

	1990 Appropriation to Date			Request to Secretary		Request to OMB		Request to Congress		
Comparison by activity:	Perm. Pos.	FTE	Amount	FTE	Amount	FTE	Amount	Perm. Pos.	FTE	Amount
Program Support:										
Administration and Services........	1,217	1,312	64,480	1,183	64,930	1,258	64,680	1,217	1,312	67,475
Facilities........................	0	0	3,421	1	13,444	1	9,473	1	1	6,677
Marine Services...................	750	804	59,240	886	64,865	883	72,254	772	823	65,848
Aircraft Services.................	93	94	7,181	99	14,431	99	9,747	93	94	9,306
Subtotal, Program Support:	2,060	2,210	134,322	2,169	157,670	2,241	156,154	2,083	2,230	149,306
Less:										
Increase in Trust Fund Transfer...	0	0	0	0	0	0	(4,074)	0	0	0
Funding from New Fees.............	0	0	0	0	0	0	(103,635)	0	0	0
Subtotal Direct Obligations	10,034	10,696	1,280,107	10,627	1,641,773	10,707	1,425,387	9,949	10,596	1,391,964
Adjustments-to-base................	0	0	0	0	16,932	0	43,759	0	0	0
A-76 Reductions....................	0	0	0	(250)	(2,119)	141	103	0	0	0
Total Direct Obligations	10,034	10,696	1,280,107	10,377	1,656,586	10,848	1,469,249	9,949	10,596	1,391,964
Financing from proposed transfers: Ocean and coastal programs funded from Coastal Energy Impact Fund	0	0	0	0	(4,700)	0	(4,700)	0	0	(6,000)
Deobligations......................	0	0	(6,000)	0	(3,000)	0	(3,000)	0	0	0
Budget Authority...................	10,034	10,696	1,274,107	10,377	1,648,886	10,848	1,461,549	9,949	10,596	1,335,964
Financing from proposed transfers:										
From "Promote and develop fishery products and research pertaining to American fisheries:...........	0	0	(55,000)	0	(53,700)	0	(61,900)	0	0	(61,900)
From Coastal Energy Impact Fund..	0	0	(4,500)	0	0	0	0	0	0	(8,000)
From Marine Conservation Assurance Fund.................	0	0	0	0	(66,480)	0	(33,160)	0	0	0
Appropriation (general fund).......	10,034	10,696	1,214,607	10,377	1,528,706	10,848	1,366,489	9,949	10,596	1,316,064

Comparison by activity:	1990 Appropriation to Date			Request to Secretary		Request to OMB		Request to Congress		
	Perm. Pos.	FTE	Amount	FTE	Amount	FTE	Amount	Perm. Pos.	FTE	Amount
OTHER ACCOUNTS:										
FISHING VESSEL AND GEAR DAMAGE COMPENSATION FUND	3	4	0	4	1,000	4	1,000	3	3	1,202
FISHERMEN'S CONTINGENCY FUND	1	1	719	1	750	1	750	1	2	1,000
FOREIGN FISHING OBSERVER FUND	4	36	1,919	36	2,000	36	2,000	15	36	1,997
FEDERAL SHIP FINANCING FUND	21	27	0	0	0	0	0	0	0	0
FISHERIES PROMOTIONAL FUND	4	3	0	0	0	0	0	0	0	0
TOTAL	10,067	10,767	1,217,245	10,418	1,532,456	10,889	1,370,239	9,968	10,637	1,320,263

OMB REQUEST

Mr. SMITH. What was your request to OMB?

Dr. WEIHER. In the OR&F account, the total budget authority was $1,461,549,000.

Mr. SMITH. What did the difference represent? What was cut out?

Dr. KNAUSS. We didn't get all the money we wanted for modernization. That was reduced by about $20 million, as I remember.

Mr. SMITH. Is that in the Weather Service?

Dr. KNAUSS. Yes, I am sorry. That was the big one that I remember. There are several others.

Mr. WEIHER. Well, essentially Fisheries, some of the fishery programs, particularly the seafood inspection program. We have gone into the $30 million request. That did not come out of OMB because the policy on seafood inspection was not finalized.

SEAFOOD INSPECTION

Mr. SMITH. What were you proposing to do with seafood inspection?

Dr. KNAUSS. We were proposing a program of seafood inspection which would be paid for by industry. The $30 million we were requesting was to help us get geared up to start that program over the next year.

Mr. SMITH. Would that be continuous inspection or sample inspection?

Dr. KNAUSS. It would be sampling inspection as proposed by the National Academy of Science.

Mr. SMITH. How are they different from the volunteer inspection programs you now have?

Dr. KNAUSS. It would be mandatory rather than voluntary, sir.

Mr. SMITH. Other than that it would be the same?

Dr. KNAUSS. It would be essentially the same. There would be some differences.

SEA GRANT

Mr. SMITH. You proposed cuts in Sea Grant in your budget. Did you ask for the full amount?

Dr. KNAUSS. No, we got what we asked for, sir. What we asked for was less than what Congress gave us last year, but it is $27 million more than we asked for the previous year. The previous years we asked for zero for Sea Grant.

SEQUESTRATION

Mr. SMITH. What was the impact of sequestration, how many dollars?

Dr. WEIHER. In fiscal year 1990 it ends up that we had a very small impact. We didn't have a sequestration in the OR&F account. As we go into FY 1991, we have taken about a $6 million sequestration.

Mr. SMITH. Not significant, then?

Dr. WEIHER. Well, $6 million doesn't sound significant until you try to find it.

Dr. KNAUSS. We were fortunate in the last year in that our budget for satellite procurement was down considerably over the previous year, so that solved that problem. Our satellite budget, it seems like a large satellite budget to me, but by NASA's standards it is very small. It does go up and down depending on year-to-year procurement. It was down $50 million this year over last year and it will be up about $50 million next year over this year. It does go up and down depending on where we stand in the cycle.

Mr. SMITH. In handling sequestration, are you taking across the board reductions or are you emphasizing taking more out of some programs than others?

Dr. WEIHER. No, they are across the board. The good news is we have significant funding for the pay increases. We have funding not only for the 1990 pay increase, but we have funding for part of the 1991 pay increase, which is something we have not had in the past.

Mr. SMITH. In the fiscal year 1990 budget?

Dr. WEIHER. In the budget before you right now.

Mr. SMITH. In the 1991 budget, yes.

PROGRAM AUTHORIZATION LEGISLATION

Mr. SMITH. What is the status of your authorizing legislation?

Dr. WEIHER. We estimate that we have about $283 million in programs that need authorization this year.

Mr. SMITH. Do you expect them to be authorized soon?

Dr. WEIHER. We expect a great deal of them to be.

Dr. KNAUSS. The Magnuson Fisheries Act is a somewhat controversial act. That may take a while. We are proposing some changes in reauthorization of the Coastal Zone Management Act. We don't expect difficulty in getting it reauthorized, but it may take a while for it to work its way through both the House and the Senate.

Mr. SMITH. What about LANDSAT?

Dr. KNAUSS. The Landast authorization expired September 30, 1989. We are requesting reauthorization through 1991 to continue funding for the completion and launch of Landsat 6.

Mr. SMITH. You have in your budget a proposal to transfer this $36 million I asked you about. That takes authorization, too, doesn't it?

Dr. WEIHER. Yes sir, that would be an FAA authorization.

Mr. SMITH. Do you expect that Act to be extended?

Dr. WEIHER. We expect it to be.

Mr. SMITH. You did ask, for the first time in eight or nine years, for a number of these programs that have been added by Congress in the past, but you only ask for part of Sea Grant and part of Coastal Zone Management. Those are programs that have had strong support. I confess I don't know nearly as much about them as some of the other members of the subcommittee, but they think those programs are very important. What are your reasons for leaving out parts of those?

Dr. KNAUSS. We think they are very important programs, too, sir. However, in building a budget for this year based upon NOAA's total budget, we felt that by showing our involvement and interest in these programs at this level, it at least kept us within our overall budget constraints. These are not low priority projects, but we felt we could leave out certain aspects and still have a strong federal program both in Sea Grant and Coastal Zone Management.

Mr. SMITH. For example, Sea Grant——

Dr. KNAUSS. For example, within Sea Grant we maintained the research and educational aspects of it and we dropped the advisory parts of it, believing that these are probably programs that could be done and perhaps should be done within the states.

Mr. SMITH. You think the States will pick that up?

Dr. KNAUSS. I think that given enough time, they can pick these up, yes.

Mr. SMITH. What are these advisories?

Dr. KNAUSS. Remember the extension agents?

Mr. SMITH. Yes.

Dr. KNAUSS. These are equivalent to the extension agent programs for Sea Grant.

Mr. SMITH. You think they will pick them up in one year?

Dr. KNAUSS. Give them enough notice, they might.

Mr. SMITH. It would be pretty difficult in one year, though, wouldn't it?

Dr. KNAUSS. Might be.

Mr. SMITH. I will yield at this time to Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman.

GLOBAL CHANGE RESEARCH PROGRAM

Let me ask you about the global change research program, one of the President's priorities. Agency-wide I am told that is a billion dollar project?

Dr. KNAUSS. That is about right.

Mr. ROGERS. What is NOAA's principal role in that effort?

Dr. KNAUSS. NOAA has a very key role in it. I would say there are three federal agencies that play key roles in the climate and global change program: NASA, which is putting up a set of special satellites with respect to this program; the National Science Foundation, which is responsible for supporting much of the basic science related to this program; and NOAA, which has the primary responsibility for monitoring both the atmosphere and the ocean for the data management with respect to these programs and for developing the predicted capability with respect to these programs.

Mr. ROGERS. You have requested for FY 1991—this year apparently here you have got 80——

Dr. KNAUSS. Eighteen million dollars.

Mr. ROGERS. I am sorry, $18 million, yes. What are those big increases, what are they to be used for?

Dr. KNAUSS. They are primarily, Mr. Rogers, to develop our observational program, much of it having to do with ocean observational program as well as making significant improvements in our data management program with respect to the large amounts of data that are being collected both nationally and internationally, and to put that data in a form that can be used by researchers and others in making progress in this area.

Mr. ROGERS. Who is the lead agency in the global change?

Dr. **Knauss**. There is no lead agency in that sense. It is a program under the science advisors that is coordinated through the Committee on Earth Sciences, CES.

Mr. **Rogers**. Is that a Cabinet level group?

Dr. **Knauss**. Dr. Bromley is an advisor to the President. I forget what his title is.

Mr. **Rogers**. He is the coordinating person?

Dr. **Knauss**. It is coordinated out of his office.

Mr. **Rogers**. NASA gets the big end, $661 million?

Dr. **Knauss**. Those satellites are very expensive, I found.

Mr. **Rogers**. Well, what is the end of that program? Are you pointing toward a report?

Dr. **Knauss**. No. Let me emphasize several things about that program, Mr. Rogers. The long-term goal of this program is to really understand to what extent greenhouse gases are being added to the atmosphere. There is no question about that, but rather what effect it will have on our climate over the next 20, 30 years.

That is a long-term and critically important goal. Depending upon how much warming there is, you can either have little or devastating effects on the economy of this country as well as the economies of the world.

In the process of getting there, we are going to make significant improvements in NOAA in our ability to do what I would call middle-range forecasting. We are quite certain, based upon our ability to monitor and develop an understanding of how the ocean atmosphere system works, that we will be able to make significant improvements on our forecasts over 30 to 90 days.

We now are making those kinds of forecasts, and they are not bad, but they are not as good as we would like. We think we can make significant improvements in those forecasts over a three- to five-year time frame. We think that within a decade we will be able to make significant forecasts on an interannual basis.

That is forecasting what the weather will be like in a general sense the following year. If we can make those kinds of improvements in our seasonal forecasts and in our year-to-year forecasts, the economic payoff from that in terms of being able to know whether or not there will be droughts, or if there will be especially cold winters so we can prepare for those things, the benefits will more than pay for this research even if we do not succeed in learning very much about climate, greenhouse gas warming and the effect on the climate 30 years from now.

I expect we are going to learn about that. It is a difficult problem. Our long-term goal is that in the process of getting there, we are going to be able to do these other things as well.

CLEAN AIR ACT AMENDMENTS

Mr. **Rogers**. The Clean Air Act amendments—we had Secretary Mosbacher before us yesterday. I told him how disappointed I was that the department has taken a powder on the Clean Air Act rewrite, the department that has in NOAA probably the best and most talented staff in terms of collecting and interpreting statistics highly relevant to agency government to tell us about what is needed in the Clean Air Act. Yet, we have seen nothing out of the Department of Commerce and specifically NOAA. It is as if there is a great big vacuum out there from this agency that has a corner on the environmental statistical market. I just wonder if you have a comment on that?

Dr. KNAUSS. We have provided information to the Administration and to Congress with respect to our observations, measurements and all those items that are under the Clean Air Act, and in particular to something called NAPAP, the National Acid Precipitation Assessment Program, which is an interagency program, but which is housed in NOAA. We have systematically provided that information to the Administration and to Members of Congress. We in NOAA do not have any regulatory responsibility with respect to the Clean Air Act.

There are limits to what we can do. We have never been backward in providing the kind of information that one needs for developing those regulatory responsibilities.

Mr. ROGERS. When is the NAPAP study due?

Dr. KNAUSS. By the first of October, although I believe in fact, the report should be available by August.

Mr. ROGERS. That is just about the time we are going to finish with the Clean Air Act in Congress.

Dr. KNAUSS. I understand.

Mr. ROGERS. Can you speed that up six months, six weeks, two months, a day?

Dr. KNAUSS. I think it is not correct to say that the results of this program are any secret.

Mr. ROGERS. Well, they are to me and to the Congress.

Dr. KNAUSS. Not to some of your staff, sir. We have had a major study, a major conference down in Hilton Head just two weeks ago which was attended by about 600 people, where the results of this study were worked over very hard by a number of people, where all the reports were looked at and discussed and so forth. We are now in the process of putting that together as a final report for one more final review.

Mr. ROGERS. Would you be willing to testify before the Energy and Commerce Committee or any committees of the Congress on the NAPAP findings?

Dr. KNAUSS. I would, but I would also suggest that perhaps Jim Mahoney, who is the director of that NAPAP study, who is on our staff, might be a more——

Mr. ROGERS. Well, whoever.

Dr. KNAUSS. Yes, there is no question about that. We would be prepared to do so.

Mr. ROGERS. I would hope you would volunteer your services. The information you have, and I am not familiar with what it is, has got to be very credible, solid, well researched information. Here the Congress is now on the verge of passing clean air legislation which is going to cost somebody tens of billions of dollars, particularly the consumers, and here is an agency of the government which possesses very valuable information which no one knows about. We spent billions of dollars on NAPAP, have we not?

Dr. KNAUSS. Yes, we have.

Mr. ROGERS. And spent 10-years on it.

Dr. KNAUSS. It is a 10-year program, that is right.

Mr. **Rogers**. I can't understand, Congress is passing this astounding piece of legislation and this valuable information is laying there unused and even untrumpeted. I really have to wonder what in the devil is going on at Commerce and NOAA that that has happened.

Dr. **Knauss**. We have indeed made this information available to Congress, to EPA, and to the Administration. I like to think that information has been used. It is true that our final report is not out. It was not asked to be out until this time. That is what our authorization said we should do. We have not made a secret of our findings. They are findings because NAPAP is an interagency program. It represents the combined findings of EPA, Department of Energy and others.

Mr. **Rogers**. Do you have something now in a written form, a preliminary report or something? My staff doesn't have it, the industry doesn't have this information. If you have given it out, boy, you sure did it very judiciously.

Dr. **Knauss**. Your staff may not have it, but I believe many people do have it. I will see to it that your staff does get it, sir. We do indeed have some information.

Mr. **Rogers**. How soon can we get it?

Dr. **Knauss**. I suspect today or tomorrow.

Mr. **Rogers**. Okay. We have been waiting on NAPAP for ten years. That is all I have heard for the last ten years. Wait until you get the report out before you act. The Congress and the President finally said we're going to do something about clean air this year. I don't understand why you don't speed up the conclusion of that report before we take action. Can you speed it up two or three months, the final report?

Dr. **Knauss**. I honestly don't know, sir. I can check.

Mr. **Rogers**. Who does know?

Dr. **Knauss**. Mr. Mahoney. I will find out. I can't report to you at this time. I can do some checking, and I will check.

Mr. **Rogers**. Will you do that for me?

Dr. **Knauss**. Yes, of course.

WEATHER SERVICE MODERNIZATION

Mr. **Rogers**. You have requested $177 million for the Weather Service modernization. Could you give us a couple of minutes worth on what that is going to include, what that money is to be used for?

Dr. **Knauss**. I will let Mr. Friday answer that question, he could probably give you more information in two minutes than I can.

Mr. **Friday**. The increased funding requested for Weather Service modernization for this year is primarily associated with the procurement of major capital investment beginning 1991. It represents an increase of $43 million in the next generation weather radar program. We will see the first of the operational installments this year. FY 1991 is the beginning of the major production and installation schedule there.

A substantial amount of funds are included in the budget for the facilities preparation as we are moving into a modernized structure. It includes an increase of funds for the automated observing systems going in around the country. These are only the Department of Commerce portions of the funding. Funds for these programs are also included in the budgets of the Department of Defense and the Department of Transportation, FAA.

In addition to that, it includes money for the final development and the initial deployment phases of the automated weather information processing system for the new field structure. It includes the beginning of the money for the actual implementation of the activities, including the training of personnel. In addition to the capital investment of new equipment, we also have to retool our people as well in preparing them for the new technologies and the new phase we will be entering into.

Those are the appropriations requested this year for the modernization of the service.

Mr. WEIHER. Attached to the longer statement are some tables that spell that out in a little more detail.

Mr. ROGERS. What portion of the total NEXRAD cost is Commerce paying for?

Mr. FRIDAY. 50 percent. Essentially half of that is Commerce. The other half is split between the Department of Defense and the Department of Transportation.

Mr. ROGERS. Let me thank you for responding to a complaint from my hometown in Somerset, Kentucky about the weather recordings that were giving out some terrible news when it was a beautiful, clear day and people were scratching their heads and wondering what was going on, but you got that fixed.

Mr. FRIDAY. We hope we have it fixed, sir.

Mr. ROGERS. The newspaper had a field day with us on that one.

GOES WEATHER SATELLITES

The GOES weather satellites, we have one running?

Dr. KNAUSS. That is right.

Mr. ROGERS. What is the life expectancy?

Dr. KNAUSS. We think there is a less than 10 percent chance of it going down before 1993. I believe that is right.

Mr. ROGERS. This request you have now includes launching in 1991?

Dr. KNAUSS. That is correct.

Mr. ROGERS. Can you meet that schedule if you have the money?

Dr. KNAUSS. Yes. It is our present understanding that we will be able to meet that schedule under the present circumstances. There are still one or two problems with the GOES satellite in terms of the development. Our information from the contractor and from NASA is that we can meet the schedule.

Mr. ROGERS. Will you be making significant changes in the satellite from the old one?

Dr. KNAUSS. They have turned out to be significant. We thought it was a small-step increase in the improvement of the satellite. One of the reasons why it has taken us somewhat longer than planned and one of the reasons why it has been more expensive than planned was those small-step increases turned out to be a major developmental problem.

Yes, they will indeed give us more information and better information than the present satellite.

Mr. **Rogers**. Let me guess, the price went up?

Dr. **Knauss**. Absolutely.

Mr. **Rogers**. Will you get a better bird, as they say, with more information coming from it?

Dr. **Knauss**. Yes, we will get more information, we will get better information and it will be more continuous.

Mr. **Rogers**. Is it designed to replace the old GOES?

Dr. **Knauss**. This is a next generation of GOES. When a new one comes up, it will replace the old one. We have five of this new generation. Eventually we will be back to a two-GOES system. They will be a new generation.

Mr. **Rogers**. But you will have two up at any given time?

Dr. **Knauss**. It is our present plan to have two up at any given time once we get back on schedule, yes.

Mr. **Rogers**. How big a factor in all of this is this shuttle schedule?

Dr. **Knauss**. Not at this time. We are now planning to launch GOES without the shuttle.

Mr. **Rogers**. How will you launch?

Dr. **Knauss**. Mr. Pyke probably knows this better than I do.

Mr. **Pyke**. These satellites were originally planned to be launched on the shuttle. We are now planning to use rockets procured under a commercial launch services contract.

Mr. **Rogers**. Has that been done?

Mr. **Pyke**. NASA has contracted for those launches. They are scheduled to be synchronized with the availability of the spacecraft.

Mr. **Rogers**. The launching vehicle should be no holdup?

Mr. **Pyke**. Right, sir.

Mr. **Rogers**. Suppose the old GOES goes down before you get the new one up? What happens then?

Dr. **Knauss**. We have been concerned about that. We do have a series of contingency plans. We have done a dry run recently with respect to how we might operate under that contingency plan. In essence, what we would be doing is using our polar orbiting satellites to provide information in a comparable sense to the kinds of information that we get from the GOES satellite. It will not be anywhere near as good. It will provide the kind of backup, at least at some level, that we will need. Hopefully we are prepared for it in case it happens.

Mr. **Rogers**. What will be the total cost of the current contract for these five satellites that will be launched?

Dr. **Knauss**. I am told, Mr. Rogers, we will not have the latest estimate until the end of March from NASA on that. I will get it to you as soon as we do.

Mr. **Rogers**. If you have a general idea, we will even take a rough estimate at this point.

Dr. **Weiher**. Right now we are talking in the order of $600 million.

Mr. **Rogers**. Total cost?

Dr. **Knauss**. Total cost.

Mr. **Rogers**. Launch vehicles included?

Mr. **Pyke**. What has been given is a rough estimate of the cost for the spacecraft complete with their instruments. The launches are in addition to that. They are also provided for in the budget.

Dr. **Knauss**. The estimate of the total cost of the GOES satellite is around $600 million. That cost has been expanding over time. The launch vehicles, once we went from shuttle to—that has not changed over time. That is fixed. I don't carry that number in my head. That has not been the problem. The problem has been with the expanding cost of the GOES satellite itself.

Mr. **Rogers**. The satellites costs $600 million. What are the launches going to cost?

Mr. **Pyke**. The current estimate, as contained in the fiscal year 1991 budget, is slightly over $500 million for the five launches.

Mr. **Rogers**. Over what span of time will those launches take place?

Mr. **Pyke**. Beginning in FY 1991 and continuing until the year 2000.

Mr. **Rogers**. Interspersed more or less evenly over that period of time?

Mr. **Pyke**. Yes. We designed a launch schedule to be able to take advantage of the fact that we expect these satellites to last five years, which is their designed life. We plan to have a launch and new spacecraft to be able to replace them when they are needed.

Mr. **Rogers**. You would have two up at any given time, and you would replace the one that got five years old or went out, I suppose?

Dr. **Knauss**. I think we would probably wait until such time as we need to replace them.

Mr. **Rogers**. You may not launch five in that span?

Dr. **Knauss**. We may be able to stretch out the launch beyond 2000.

Mr. **Rogers**. I am surprised these don't last longer than they do. What is the reason for the short span?

Dr. **Knauss**. I believe because they are operational satellites, we try to be a bit conservative in our estimates because we need them up on a regular basis. The present, or the first of the GOES satellites, did have a problem in that they, believe it or not, burned out light bulbs. For the one that is up, we replaced that system with another system of—light emitting diodes.

The point is if we hadn't replaced or made that slight improvement in the present GOES satellite, we could be on zero satellites now, because this one has lasted longer than the previous four have lasted. Although we have a design life for these of five years, we are all hopeful they will last longer than that.

Mr. **Pyke**. These satellites are among the most complex devices mankind has ever built. They have electronic and electromechanical components on board as well as on-board fuel to send back the imagery and other information that we require. In the early experience with the GOES satellites, despite everyone's best efforts out at NOAA, NASA and contractors, we were lucky to get two, three, even four years out of the satellites.

GOES, the one that failed a year ago, through a lot of diligent effort on the part of our staff in managing the fuel on board and the use of the satellite, we were able to get almost six years out of that satellite. The design lifetime of these satellites is five years. That is based on the expected lifetime of the various components and the amount of redundancy that is built into the spacecraft. There is an inherent limiting lifetime for these spacecraft based on the amount of fuel on board in order to keep them within the range necessary to take the imagery.

Dr. Knauss mentioned the 1993 date as the latest date that we could have the current GOES operating. That is based on the expected end of availability of adequate fuel to keep it operating.

Mr. **Rogers**. The fuel you are talking about is the fuel required to station it?

Mr. **Pyke**. It is to station it. These satellites tend, by natural phenomena, to move away from the equator. They are 22,000 miles up, over the equator. They tend to move away from the equator. They need to be shoved back towards it to get the kind of imagery we need in order to provide the data that the National Weather Service and others need to forecast.

Mr. **Rogers**. Thank you.

HARBOR MAINTENANCE TRUST FUND TRANSFER

Mr. **Smith**. You are proposing to transfer money from the Harbor Maintenance Trust Fund to the Marine Waterways Trust Fund. Why is that?

Dr. **Weiher**. It is a user fee that we are proposing. Essentially what we are proposing to do is to create a new fund within the Corps of Engineers Harbor Maintenance Fund, which would——

Mr. **Smith**. Are those the fees on banks?

Dr. **Weiher**. These are fees on cargo coming and going in coastal ports in the United States. It doesn't apply to inland waterways. We would estimate, essentially, what the Corps right now charges, as I understand, about $4 per $10,000 worth of cargo. They are proposing to raise that to about $11.

Mr. **Smith**. It is an existing fee that you are proposing to increase?

Dr. **Weiher**. That increase the Corps would do, we would propose to increase it to go an additional dollar per $10,000 of cargo. That, we estimate, would generate about $45-1/2 million, which we would use to offset various NOAA marine-related programs.

Mr. **Smith**. As far as our scoring and our caps, it has no benefit to us? Is it scored the same way?

Dr. **Weiher**. It would be scored just the same way that the Aviation Trust Fund is scored.

Mr. **Smith**. Why isn't this done in the authorizing bill, or is this a proposal in your authorization?

Dr. **Weiher**. This is a proposal.

Mr. **Smith**. I see.

Dr. **Knauss**. This is a fund that had been in existence for some time in the Army Corps of Engineers. This will be the first time NOAA will be a part of that fund.

Mr. **Smith**. That proposal is before which committee?

Dr. **Weiher**. As I understand, the Administration is considering packaging up a whole set of user fee proposals. Those would be submitted up here. Obviously they would find their way both to the authorizing committees and, I presume, to the Ways and Means and Finance Committees.

ZEBRA MUSSEL

Mr. SMITH. We have received a letter here with a good many Members' names on it about the zebra mussel problem. What can you tell us about that problem?

Dr. KNAUSS. Well, the zebra mussel is indeed a problem, Mr. Chairman. Zebra mussel is a European mussel that found its way into the Great Lakes essentially attached to the hull of a ship such as barnacles are attached. It is a new and exotic species. It doesn't seem to have enough natural enemies as far as the Great Lakes are concerned. There is some reason to believe it is beginning to clog up inlet pipes in somewhat the same way barnacles do. It is growing rapidly.

We have put together a team of people from our various research laboratories. We are trying to assess the magnitude of the problem and what we can do about it.

We agree with the letter that you have there. I haven't seen the letter. But, we are certainly convinced that it can be a very real problem. We are trying to get a handle on the situation—it is a relatively new phenomenon.

Mr. SMITH. Does your FY 1991 budget reflect the amount of research that is needed?

Dr. KNAUSS. We do not have any funds in our proposal, per se, for the zebra mussel. We expect, through Sea Grant, the Great Lakes Environmental Research Laboratory and so forth to address that problem.

Mr. SMITH. Adequately?

Dr. KNAUSS. I hope adequately. Until we know a little bit more about the nature of the problem, it is a little difficult for me to tell you we are in a position to address it adequately. I can guarantee a year from now when we come here, if we better understand the problem, we will be able to better address it.

Mr. SMITH. What part will the Great Lakes Laboratory carry out?

Dr. KNAUSS. I am not sure exactly. Dr. Ostenso is our Acting Chief Scientist.

Dr. OSTENSO. They play a key role, as do the network of Sea Grant colleges and the EPA Laboratories. Its potential is to be a more severe problem than the lamprey problems in the Great Lakes.

Mr. SMITH. Well, my question really is how does what you are saying now coincide with the proposed cut in that lab?

Dr. OSTENSO. We are hopefully balancing that problem over support for the Sea Grant program to maintain our total effort.

Mr. SMITH. You said they have a key role. Will that lab get more money out of Sea Grant?

Dr. OSTENSO. They are working together. This past year we have developed a joint institute of formal working relationship between the Sea Grant network and the laboratory supporting that research.

	1990 Appropriation to Date			Request to Secretary		Request to OMB		Request to Congress		
Comparison by activity:	Perm. Pos.	FTE	Amount	FTE	Amount	FTE	Amount	Perm. Pos.	FTE	Amount
SUMMARY										
OPERATIONS, RESEARCH, AND FACILITIES	10,034	10,696	1,214,607	10,377	1,528,706	10,848	1,366,489	9,949	10,596	1,316,064
FISHING VESSEL AND GEAR DAMAGE COMPENSATION FUND	3	4	0	4	1,000	4	1,000	3	3	1,202
FISHERMEN'S CONTINGENCY FUND	1	1	719	1	750	1	750	1	2	1,000
FOREIGN FISHING OBSERVER FUND	4	36	1,919	36	2,000	36	2,000	15	36	1,997
FEDERAL SHIP FINANCING FUND	21	27	0	0	0	0	0	0	0	0
FISHERIES PROMOTIONAL FUND	4	3	0	0	0	0	0	0	0	0
TOTAL	10,067	10,767	1,217,245	10,418	1,532,456	10,889	1,370,239	9,968	10,637	1,320,263
(Proposed for Later Transmittal)										
Operations, Research, and Facilities	0	0	0	0	0	0	0	0	(752)	(45,481)
Marine Waterways Trust Fund	0	0	0	0	0	0	0	0	752	45,481

Mr. SMITH. It seems to me that you are saying you won't have any more resources between Sea Grant and the lab?

Dr. KNAUSS. No, we won't have. That is true. But what we will be doing is when we have a major problem like this, we will essentially say this is a higher priority and we will be spending some time working on this problem, which will mean we will be doing less in other areas.

I am not prepared to tell you at this point how the laboratory directors are going to have to readjust their priorities. But we have indeed targeted this as a major concern.

Mr. SMITH. So you look for something to eat these mussels?

Dr. KNAUSS. We would like to find a way to kill them.

Mr. SMITH. Then you look for something to eat, whatever it was you said, the mussels?

Dr. KNAUSS. We would hope that whatever eats those mussels would be soft so they don't close up the pipes.

LANDSAT SATELLITE

Mr. SMITH. You are requesting an increase of $1.6 million for LANDSAT. What are the recommendations of the Department to the National Space Council concerning options for continuing LANDSATs after LANDSAT 6?

Dr. KNAUSS. The Space Council is under advisement at present on the issue of the continuation of LANDSAT after LANDSAT 6 and who should pay for it. At this time no formal decision has been made with respect to how that will be done. That decision will be made, it is my understanding, some time within the next year. As of this moment, we know where we are going with respect to the launch of LANDSAT 6. Beyond LANDSAT 6, who will pay for it, how it will be arranged, how it will be done is something that is still under consideration within the Administration, sir.

Mr. SMITH. Well, is there any significant movement toward resolving who is going to pay for it?

Dr. KNAUSS. I hope so. Yes, sir. I can assure you that it will have to be resolved before the next budget cycle.

Mr. SMITH. Are you still getting resistance from the people who say it is so important, but don't want to pay anything for it?

Dr. KNAUSS. As far as the budget for this year and next year, those agencies within the Federal Government who do indeed use LANDSAT, are indeed paying for it.

Mr. SMITH. Not voluntarily?

Dr. KNAUSS. Well, the money arrives.

Mr. SMITH. They are still objecting to it, I suppose. If we don't keep the pressure on, they will not want to continue. Are they still resisting?

Dr. KNAUSS. I can't say that they are really resisting it. Everybody has a tight budget. Nobody likes to pay for anything they don't have to.

SILVER SPRING RELOCATION PROPOSAL

Mr. SMITH. Tell us about your move to Silver Spring? What is the status of that project?

Dr. **Knauss**. We are moving into Buildings 1 and 2 of Silver Spring. NOAA would be perfectly prepared to essentially move into Building 3 and 4 of Silver Spring. There are no funds in the budget to cover that move. At the moment, the move to Silver Spring Buildings 3 and 4 is not on our agenda for FY 1991.

Mr. **Smith**. What impact does that have on you?

Dr. **Knauss**. It is difficult to say what impact it has. We operate around the city in various buildings in the general area, both in Rockville and in Suitland. We have another facility up on Dupont Circle as well as the consolidation movement in Buildings 1 and 2 in Silver Spring. I think there is no question that there would be some advantages if we could all be together, but I don't know that it is perhaps worth the cost.

Mr. **Smith**. It is not as high a priority as some other things you have?

Dr. **Knauss**. That is why it is not in our budget, sir.

Mr. **Smith**. Okay. We have several more questions we will ask, but that is all I have.

Mr. Rogers?

Mr. **Rogers**. I have nothing further.

Mr. **Smith**. We will submit some more questions to you for the record.

Thank you.

[The following questions were submitted to be answered for the record:]

QUESTIONS SUBMITTED BY MR. SMITH

REQUEST TO OMB

QUESTION:

What was your budget request to OMB for FY 1991, what items were eliminated from that request, and what will be the impact on your activities as a result of those reductions?

ANSWER:

The FY 1991 budget authority (ORF) request to OMB was $1,464,089,000. The following items were reduced by OMB.

(Dollar amounts in thousands)

ACTIVITY/ITEM	OMB REDUCTION
NATIONAL OCEAN SERVICE	
Geodesy equipment	$1,000
Oil spill response and assessment	1,500
Coastal ocean science	13,730
NATIONAL MARINE FISHERIES SERVICE	
Bering Sea pollock research	250
Habitat research	322
West coast groundfish	57
Pacific salmon treaty	292
Protected species	574
SEAMAP	58
Gear entanglement	44
Econ/comm. fish statistics	181
PACFIN	1,000
Nearshore analysis/stock abundance	57
ADP upgrades	1,300
Regional fisheries mgmt. councils	234
Marine fishing fee implementation	1,522
Enforcement and surveillance	500
Fisheries trade promotion	12
Product quality and safety	2,091
Mandatory seafood inspection	30,000
OCEANIC AND ATMOSPHERIC RESEARCH	
Climate and global change	24,005
GFDL computer	200
PROFS	1,883
GLERL	1,100
NURP	7,000

NATIONAL WEATHER SERVICE

NWS Southern Regional HQ	852
NWS Pacific and AK HQ	383
Equipment maintenance	1,054
Agricultural and Fruit Frost Program	1,277
NEXRAD	7,318
ASOS	2,600
AWIPS	14,133
NOAAPORT	4,050
Class VII computer	500

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

Polar satellites	33,819
Geostationary satellites	24,394
Landsat oversight	1,100
Data and Information service	200

PROGRAM SUPPORT

Facilities maintenance	1,779
Facilities consolidation	1,000
Ship reactivation/DAS	5,961
Science/survey platform improvement	2,000
Aircraft operations base funding	700

There will be no impact on our programs as a result of OMB reductions. The projects reduced or eliminated should be appropriately funded by the states or the locality which directly benefits, since these projects are not the responsibility of the Federal Government. In addition, we concentrate only on high priority projects/programs that are central to NOAA's mission.

IMPACT OF SEQUESTRATION

QUESTION:

What amounts were sequestered from your FY 1990 appropriations, and what will be the impact of those reductions on your programs in FY 1990?

ANSWER:

The following table reflects sequestered amounts from NOAA's FY 1990 appropriation.

(Dollar amounts in thousands)

Fishermen's Contingency Fund	$2
Foreign Fishing Observer Fund	23
Aviation Weather Services Trust Fund	417
TOTAL:	442

There will be no programmatic impact of these reductions. They will be taken through reductions in travel, transportation, and contracts.

STATUS OF AUTHORIZING LEGISLATION

QUESTION:

Please provide for the Record a listing of the programs and projects which were funded in FY 1990 and the amounts for each, which are not authorized, for FY 1991 and were omitted from your budget request.

ANSWER:

(Dollar amount in thousands)

NATIONAL MARINE FISHERIES SERVICE

Information Collection and Analysis

Resource Information	
Stock enhancement/disease research	$ 4,287
Atlantic salmon research	500
Antarctic research	1,300
Chesapeake Bay Studies	1,600
Sub-Arctic bottomfish research	753
Hawaii FMP development	400
Alaska salmon enhancement activities	3,766
Yukon River Chinook study	235
Oyster disease research	500
Field structure consolidation	4,000

Conservation and Management Operations

Fisheries Management Programs	
Columbia River Program	9,300
Manage Georges Bank fisheries	471

State and Industry Assistance Programs

Terminate Inter-jurisdictional Fisheries grants	3,500
Terminate anadromous grants	2,354
Terminate striped bass research	471
Terminate support of Interstate Fisheries Commission	330
Reduce Product, Quality & Safety Research (PQS)	4,400
Terminate fish oil research	942
Terminate Mahi Mahi export strategies funding	188
Terminate Model Seafood Inspection Program	330
Terminate water standards research	500
TOTAL:	40,127

OCEANIC AND ATMOSPHERIC RESEARCH

Climate and Air Quality Research

Terminate National Climate Program	1,090
Terminate Regional Climate Centers	1,800
Terminate Intergovernmental Panel on Climate Change	250
TOTAL:	3,140
TOTAL, OPERATIONS, RESEARCH, AND FACILITIES	43,267

Proposal for Later Transmittal

QUESTION:

Please list for the Record each of the programs and projects which you are proposing to eliminate or reduce in FY 1991, which were funded in FY 1990.

ANSWER:

The following list provide programs/projects which are proposed for elimination or reduction in FY 1991, but were funded in FY 1990.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

FY 1991 BUDGET

OPERATIONS, RESEARCH, AND FACILITIES

FY 1991 PROPOSED DECREASES

(Dollars in Thousands)

NATIONAL OCEAN SERVICE	Decrease
Mapping, Charting and Geodesy	
o Terminate South Carolina Geodetic Surveys.	577
o Terminate Multi-Purpose Cadastre Program..	1,836
o Terminate Great Lakes Mapping Project.....	100
Observation and Assessment	
o Reduce Circulatory Survey Program.........	400
o Terminate Federal/State Demo Project with South Carolina...........	900
o Terminate Tampa-Bay Mapping Project.......	1,000
o Terminate Long Island Sound Project.......	1,000
o Terminate State-Specific Ocean Services...	875
o California Data Buoys.....................	151

Ocean and Coastal Management	Decrease
Reduce Section 306 and 306A Grants	4,000
Terminate Section 309 Grants	400
Reduce CZM Program Management	500
TOTAL, National Ocean Service	**-11,739**

NATIONAL MARINE FISHERIES SERVICE
Decrease

Information Collection & Analyses

Stock Enhance./Disease Research	4,287
Protected Species Research	649
Atlantic Salmon Research	500
Antarctic Research	1,300
Chesapeake Bay Studies	1,600
Sub-Arctic Bottomfish Research	753
Right Whale Research	235
Hawaii FMP Development	400
Alaska Salmon Enhancement Activities	3,766
Yukon River Chinook Study	235
Oyster Disease Research	500
Field Structure Consolidation	4,000

Conservation and Management Operations:

Columbia River Program	9,300
Manage Georges Bank Fisheries	471
Terminate Harbor Seals and Sea Lions	36

State and Industry Assistance Programs:

Terminate Inter-jurisdictional Fisheries Grants	3,500
Terminate Anadromous Grants	2,354
Terminate Striped Bass Research	471
Terminate support of Interstate Fisheries Commissions	330
Reduce Product, Quality & Safety Research (PQS)	4,400
Terminate Fish Oil Research	942
Terminate Mahi Mahi Strategies Funding	188
Terminate Model Seafood Inspection Program	330
Shellfish Water Standards Research	500
TOTAL Fisheries Programs	**-41,047**

OCEANIC AND ATMOSPHERIC RESEARCH	Decrease
Climate and Air Quality Research	
o Terminate Participation in NAPAP	1,487
o Reduce National Climate Program	1,090
o Terminate Regional Climate Centers	1,800
o Terminate Intergovernmental Panel on Climate Change	250
Atmospheric Programs	
o Reduce PROFS	1,883
o Terminate State Weather Modification grants	2,213
Ocean and Great Lakes Programs	
o Terminate Seafloor Processes Research (VENTS)	2,000
o Reduce GLERL	1,600
o Terminate SE FOCI program	942
o Reduce Sea Grant	13,300
o Terminate National Coastal Resources R&D Institute	1,177
o Terminate U.S.-Asia Aquaculture Science Exchange	282
o Terminate National Undersea Research Program	14,285
o Terminate Key Largo Tropical Research Facility	377
TOTAL Oceanic and Atmospheric Research	**-42,686**

NATIONAL WEATHER SERVICE	Decrease
Operations and Research	
o Reduce Staff at Eight WSFO's	787
o Consolidate Southern Region Headquarters	852
o Reduce Data Buoy Test & Engineering	540
o Discontinue Maintenance of Four Bouys in Hawaii	565
o Consolidate Pacific Region with Alaska Regional HQ	383
o Terminate Special Agricultural Weather Services	1,745
o End Specialized Fruit Frost Services	679
o Reduce Fire Weather Services	470
o Susquehanna River Basin Flood Warning System	700
o Colorado River Basin Flood Warning System	300
o Cancel Contract Observations at three Locations	200
o Reduce Equipment Maintenance	1,054

Systems Acquisition	Decrease
o Class VII Computer	500
TOTAL National Weather Service	**-8,775**

NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE	Decrease
Satellite Observing Systems:	
o Polar Ground System	4,334
o GOES Satellites	26,202
o LANDSAT Operations	9,500
TOTAL National Environmental Satellite, Data, & Information Service	**-40,036**

PROGRAM SUPPORT	Decrease
Facilities Maintenance	
o Terminate Funding for Woods Hole Bulkhead and Dock Maintenance	2,000
Marine Services	
o Close Southeast Marine Support Facility.	282
TOTAL Program Support	**2,282**

Adjustments to Base	
o Buxton Woods acquisition completed FY 1990..	1,500
o St. Paul Trust Fund	1,600
o St. Georges Trust Fund	1,100
o Alaska Whale Reimbursement	170
o University of New Hampshire Program	2,000
o Marine Electronic Agenda	675
o Beaufort, N.C. Lab. Maintenance	200
TOTAL Decreases	**153,810**

OCEAN COASTAL INITIATIVE

QUESTION:

You are requesting an increase of $11 million to continue and expand the research initiative in Coastal Ocean Science. What information do you hope to gain from this research program?

ANSWER:

NOAA's Coastal Ocean Program is more than a research program. It is a long-term program designed to improve coastal and Great Lakes environmental decisions by supplying timely, scientifically sound information. The

Program will deliver valuable services and products to local, state, and federal lawmakers; coastal resource managers; and federal and academic researchers as they work to solve coastal ocean problems. The Program will deliver a wide spectrum of valuable information and products. For example, NOAA will:

- Provide coastal resource managers with detailed information and develop models on the effects human-induced nutrient over-enrichment has in the Mississippi River Plume, Louisiana continental shelf, and the Southeast Atlantic Bight. These represent some of our most productive coastal areas and are particularly vulnerable to human activities.

- Assess the severity of nutrient over-enrichment throughout U.S. coastal waters through its National Status & Trends program and monitor areas with substantial problems.

- Provide information on how the atmosphere transports nutrients into our coastal waters. Evidence suggests significant amounts of nutrients enter our coastal waters via the atmosphere. The East Coast of the U.S. is particularly vulnerable to this. NOAA studies will help identify where nutrients are coming from so that responsible management policies can be implemented to reduce them.

- Provide resource managers with up-to-date mapping information on the status and rate of change of coastal wetlands via satellite. NOAA will do this through its CoastWatch-land program which will provide coverage for most coastal wetlands areas in the U.S. This information will enable resource managers to readily assess habitat conditions on a frequent, 1-acre basis and evaluate the impact erosion, pollution, and development have on them.

- Provide detailed information on the success of techniques used to restore lost and damaged wetlands and on the function and health of tidal wetlands, seagrasses, and mangroves. Over 70% of commercial fisheries rely on these estuaries for survival, yet almost 20,000 acres are lost annually. The information and models from NOAA will enable lawmakers and resource managers to implement programs to safeguard and restore this valuable resource.

- Establish CoastWatch-water throughout the U.S. to enable resource managers and decisionmakers to identify, monitor, and predict unusual environmental events, such as red tides, that could adversely impact their fisheries. CoastWatch-water will also provide researchers with a valuable tool to study the impact of natural variability on fisheries.

- Provide lawmakers and resource managers better information on toxic chemical contaminates where they come from and how they affect living marine resources, so they can act appropriatly to reduce contaminants and their effects on important resources.

- Improve the predictions of tsunami inundation on West Coast, Alaskan, and Hawaiian coastal communities and upgrade the tsunami measurements system in the Gulf of Alaska.

- Provide better predictions of hurricane flooding of vulnerable U.S. coastal locations by adding predictions for one additional site per year.

- Improve NOAA's ability to get its data and information into the hands of those who need it by:

  - Expanding Coastal Ocean Management, Planning, and Assessment System (COMPAS) which will be implemented in Texas this year. COMPAS is a geographic information system (GIS) designed for state coastal resources managers. It is a user-friendly computer system that provides information on the coastal environment such as pollution, land use, and habitat status. COMPAS will help state resources managers meet Clean Water Act reporting requirements; improve management of shellfish waters; identify impacts of wetlands permitting; and measure impacts of coastal development and land use.

  - Improving its Ocean Communications Network (NCON) by upgrading its telecommunications and analysis (Interactive Marine Analysis and Forecast System) capabilities at existing sites and adding capabilities to new sites throughout the U.S. These capabilities make data and information more available to government and academic fisheries scientists, oceanographers, and meteorologists.

QUESTION:

How much have you spent to date on this effort, and what information have you gained so far?

ANSWER:

NOAA just recently received the FY 1990 money Congress appropriated for the Coastal Ocean Program (see the chart on the next page). NOAA management has approved specific projects within the program and has transferred funds to get them started. Some of these efforts are research-oriented and long-term in nature. The valuable information they provide will come later; however, other activities will provide immediate information on the coastal ocean. For example, by the end of FY 1990:

- We will have more information on the impacts toxic chemical contaminants have on living marine resources (i.e. reproduction impairment). We will also know about the levels and trends of contaminants in the Hudson-Raritan Estuary and Tampa Bay -- two coastal areas with substantial contaminant problems.

- CoastWatch will enable NOAA to map coastal wetlands in the Chesapeake Bay and sea grasses in South Carolina to assess the impact that human activities (i.e. development, erosion, and pollution) have on these critical resources.

- Demonstration of COMPAS in Texas (a geographic information system designed for state resource managers), will enable NOAA to evaluate the system's effectiveness and make necessary adjustments before implementing it in other states.

- NOAA will expand its knowledge of and ability to track unusual environmental events that can impact important fisheries.

Part of the FY 1990 funds will improve NOAA's information delivery system by adding new stations to its Ocean Communications Network.

QUESTION:

What is the total budget plan for this project?

ANSWER:

The President's FY 1991 request for the Coastal Ocean Program is $17.4 million. NOAA has identified seven broad areas within the Program where the funds will be allocated (in millions):

	FY90 Allocation	FY91 Allocation
Toxic Chemical Contamination	$ .87	$ 2.00
Nutrient Over-Enrichment	1.91	3.30
Physical Impacts	--	.20
Estuarine Habitats	1.83	4.00
Coastal Fisheries Ecosystems	--	3.50
Information Delivery Systems	.92	2.00
Satellite. & Conv. Observations	.87	2.40
TOTAL	$6.40	$17.40

NWS MODERNIZATION PROGRAM

QUESTION:

You are requesting a total increase of $76,526,000 for systems acquisition for the National Weather Service. How much of this amount is for production and installation of equipment, and how much is for applied research and development?

ANSWER:

Of the $76,526,000 increase for systems acquisition requested in the President's FY 1991 budget, $28,996,000 has been identified as supporting risk reduction, research and development activities. The remaining amount of $47,530,000 will support production and installation of equipment. It should be noted that of the $28,996,000, $26,500,000 is associated with the AWIPS/NOAAPORT program and will be used for risk reduction activities and for development of software/hardware for the Development Phase contract (the second stage of the A-109 major systems acquisition process). The following table provides a detailed distribution of these estimates.

	Research & Development	Production & Installation	Total
NEXRAD	1,196	42,088	43,284
AWIPS/NOAAPORT	26,150	2,217	28,367
ASOS	1,650	3,725	5,375
Class VII	0	- 500	- 500
TOTAL	28,996	47,530	76,526

QUESTION:

Could the amounts for the production of NEXRAD units and production of the automated surface observing systems be stretched out if the budget situation requires a reduction?

ANSWER:

NEXRAD:

The Government cannot stretch out the production or funding of NEXRAD units without major cost penalties. With exercise of the full-scale equipment option of the Unisys contract, the Government committed the Departments of Commerce, Defense, and Transportation to contractually specified incremental funding on an annual basis to fund production costs for the contractual schedule of deliveries.

Fixed pricing contained in the full-scale NEXRAD production option with Unisys is based on an economic quantity buy of a large quantity over a specified period of time designed to maximize production efficiencies. Pricing of this economic quantity was greatly influenced by the intensity of the competition between A-109 rival vendors. Failure to meet contractual funding requirements and delivery schedules would result in settlement costs for termination of the contract and a forced renegotiation of fixed prices. Renegotiated contracting arrangements would be based on a more costly, year-by-year purchase--where quantities of goods to be purchased are influenced solely by a single year's requirements and no economies of scale for a long-term production run are realized. Renegotiation of contract pricing on a sole source basis with Unisys would lack any downward pressure on pricing from the competitive marketplace.

ASOS:

The automated surface observing system (ASOS) production contract award currently is scheduled for August 30, 1990, with deployment of NOAA units extending from January 1991 through December 1994. Stretching out the production schedule would entail significant additional costs both within the ASOS program and for the NWS modernization as a whole.

The NOAA deployment schedule is integrated with schedules for the other Federal agencies (FAA and DOD) in such a way that: (1) a cost-effective overall national deployment for the three agencies is achieved; and (2) NOAA's formal schedule commitments to FAA and DOD are maintained. Significant delays in the NOAA schedule would inevitably lead to higher unit costs for all three agencies.

In addition, the current NOAA schedule for deployment of ASOS is linked to reductions in staff time for taking observations that will permit redirection of staff to implement other critical elements of the NWS modernization. ASOS delays would impact overall NWS modernization staffing requirements.

The NWS plans to acquire ASOS at the lowest cost to the Government by contractually committing to a fixed deployment schedule for the entire base program (250 NWS units, 592 FAA units, 86 Navy units), together with "cancellation liabilities" should the Government change schedules or other plans. Schedule delays following production contract award would be extremely costly.

QUESTION:

Will NOAA maintain all existing public warning and forecast stations until the new automated radar and observer systems are installed and operational?

ANSWER:

The FY 1991 Budget includes funding to maintain all existing public warning and forecast offices. When the new Weather Forecast offices assume forecast and warning services with no deterioration of existing services, current weather service offices will be consolidated.

QUESTION:

Has the National Weather Service developed a plan or schedule for closing of stations when the new automated systems are in place?

ANSWER:

The National Weather Service (NWS) has defined a process for complying with the certification requirements of P.L. 100-685. This process involves many more steps than just implementing automated systems. The steps to implementing the NWS modernization and associated restructuring program are described in a hierarchy of transition implementation plans. The National Implementation Plan (NIP) provides broad guidance for the internal elements of the NWS and for the external users of its warning and forecast services. The NIP is based on the Strategic Plan for the Modernization and Associated Restructuring of the National Weather Service that was published in March 1989.

The next tier in the planning hierarchy consists of the NWS Regional Transition Plans (RTPs). These plans provide regional guidelines for the realignment of operational responsibilities. The RTPs specify the specific program changes required and the steps to accomplish these changes in order to maintain a smooth transition from present operations to the modernized and restructured mode.

The final tier of the planning hierarchy consists of the Site Implementation Plans (SIPs) which detail specific actions and schedules for accomplishment of elements of the modernization and restructuring process. A separate SIP will be prepared for each Weather Forecast Office (WFO) and its area of responsibility and for each River Forecast Center (RFC) within the NWS. It is within these SIPs that specific plans and schedules for realignment of services, including the closing of offices, will be addressed in compliance with the certification requirements of P. L. 100-685. The precursor actions to the certification process will be identified within the individual SIPs and detailed schedules will be presented. The schedules as to when specific items will be accomplished will depend on several classes of activities such as advanced technology (e.g., the advanced NEXRAD radar system, the Automated Surface Observing Systems (ASOS), and the Advanced Weather Interactive Processing Systems (AWIPS)) implementation, professional staffing adjustments, and training of NWS meteorologists and hydrologists in the use of the advanced technological systems and scientific applications.

SATELLITE OBSERVING SYSTEMS

QUESTION:

The budget reflects a reduction of $9.5 million for operational support for LANDSAT-4 and LANDSAT-5. What are the status of those satellites? Will they cease to be operational at the end of FY 1990?

ANSWER:

Landsats 4 and 5 were designed to operate three years. Landsat 4 has been in operation eight years; Landsat 5 has been operating for six years. While both satellites have lost much of their redundancy, they continue to supply useful data to domestic and foreign users. Both satellites are expected to cease operating.

POLAR ORBITING SYSTEM

QUESTION:

You are requesting an increase of $49,472,000 for the Polar Orbiting System. What is the status of this program, what are the current launch dates, and do you expect those dates to be met?

ANSWER:

The NOAA-D spacecraft (NOAA-12 after launch) is scheduled for launch in July 1990. It will replace NOAA-10, which was launched in September 1986, and has experienced progressive solar array degradation and is rapidly approaching the end of its useful life. Integration of instruments with the spacecraft have begun for NOAA I and J. For the NOAA K, L,M spacecraft series, work has begun. Projected launch dates are tabulated below. It should be noted that actual launch dates are a function of the performance and capabilities of the currently operational spacecraft with launches conducted under a replace-as-needed policy. Under this policy, a launch failure could require availability of a replacement satellite as much as one year earlier than the projected launch date. Current schedules are designed to meet that contingency.

SATELLITE	PROJECTED LAUNCH DATE
NOAA - D	July - 1990
NOAA - I	May - 1991
NOAA - J	January - 1992
NOAA - K	December- 1993
NOAA - L	August - 1995
NOAA - M	July - 1996

GOES SATELLITE SYSTEM

QUESTION:

The budget reflects a reduction of $26.2 million for the Geostationary (GOES) System. Three years ago the Committee was informed that there could be a $300 to $400 million cost increase for the GOES program. If so, what is the reason for this proposed reduction?

ANSWER:

The FY 1991 budget request represents the year-to-year fluctuation in funding required for this program. It incorporates a reduction of $32 million for spacecraft and an increase of $6 million for launch services. This change recognizes that design and development of spacecraft and payload instruments will have been completed in 1990, and only production, integration, and test activities will be underway in 1991. The FY 1991 funding requirement for the spacecraft contract was adjusted to correspond with the funding needed to support the reduced level of staffing required by the contractors during this stage of the program.

The budget request is consistent with the minimum required funding for this program based on NASA's latest official cost estimate.

QUESTION:

What was the contractor's original estimate of the cost of the GOES replacement program, and what is the current estimate?

ANSWER:

The original GOES I-K contract value was $203 million. When the GOES L and GOES M satellites were added, the contract value was increased to $276 million. At that time, NASA estimated that this contract would cost over $400 million.

The FY 1991 budget submission incorporates the latest official NASA estimate of the anticipated total cost for the program. The budget submission includes $587 million as the current contractor estimate.

QUESTION:

We understand that some consideration is being given to delaying the current launch date for the replacement GOES Satellite. What would be the reasons for such a delay, what would be the additional cost of such a delay, and when do you expect a decision on this matter?

ANSWER:

NOAA, NASA and Ford Aerospace are currently working toward launch of the GOES I satellite in June 1991. This is the earliest date that a fully qualified satellite can be made available for launch. Delays beyond June 1991 will only be considered based on operational and cost consideration and if it becomes clear that GOES I cannot be qualified in time to support a launch in that month. Any delay in the GOES I launch would cost approximately $4 million per month if other cost containment actions are not available.

MAJOR MAINTENANCE PROJECTS

QUESTION:

You are requesting an increase of $2,750,000 to begin major maintenance projects at NOAA facilities nationwide. How many facilities would this initiative include?

ANSWER:

This facilities maintenance initiative will address repairs and replacements only at Federally-owned, NOAA-held buildings. While NOAA operates at approximately 447 different installations in the United States, its territories, and a very few foreign countries, only 228 sites are owned by the Federal Government and held by NOAA. There are approximately 326 buildings of all sizes and condition at these sites.

QUESTION:

What plans, if any, does NOAA have to consolidate its facilities?

ANSWER:

$36.3 million was appropriated in FY 1990 to the GSA Public Building Fund to construct a new facility adjacent to the existing government-owned laboratories in Boulder, Colorado. This building will allow NOAA to consolidate laboratory and office operations currently in rented space elsewhere in Boulder with the operations at the existing Boulder Laboratory building site. It will also result in releasing space for the National Institute of Science and Technology (NIST) and other Commerce units in the existing buildings. The development of this project is being handled by the General Services Administration. The project is projected to be completed in 1993.

A major review of all facilities operated by the National Marine Fisheries Service is currently underway. It is designed to analyze and recommend realistic alternatives for potential realignments of the network of facilities operated by NMFS, including, but not limited to facility consolidations.

MARINE SERVICES

QUESTION:

You are requesting an increase of $4 million to initiate a modernization and upgrade program for the NOAA fleet and $2,010,000 and 25 positions to reactivate the NOAA ship DAVIDSON. Last year you proposed a deactivation of the DAVIDSON as well as other vessels. What has prompted this change in the use of the NOAA fleet?

ANSWER:

The average age of the ships in the NOAA fleet is 26 years. A service life extension program must be initiated now to ensure that the fleet is available to meet NOAA's needs in the future. The President's Budget requests funding to reactivate the DAVIDSON. Under the Administration's proposed harbor maintenance fee, the Davidson would be supported with funds derived through transfer from the Harbor Maintenance Trust Fund to the proposed Marine Waterways Trust Fund which will support the Nautical Charting program as well as other marine programs. The ship will collect data to update charts of coastal Alaska and other U.S. coastal areas.

QUESTION:

A recent GAO report indicated that NOAA believes that fleet support is currently inadequate for your needs and that the demand for additional "days at sea" will increase considerably over the next 20 years. Has NOAA adopted a plan, as recommended by GAO, to respond to this need?

ANSWER:

NOAA, under the direction of the Chief Scientist, is currently in the process of developing a plan to determine its needs for fleet support into the next century. A task force will address fleet requirements, size and mix, and alternatives.

GLOBAL CHANGE RESEARCH PROGRAM

QUESTION:

Your budget request includes a program increase of approximately $70 million for NOAA's share of the global change research program. What is the purpose of this multi-agency program?

ANSWER:

The goal of the U.S. Global Change Research Program is:

> TO ESTABLISH THE SCIENTIFIC BASIS FOR NATIONAL AND INTERNATIONAL POLICY MAKING RELATING TO NATURAL AND HUMAN-INDUCED CHANGES IN THE GLOBAL EARTH SYSTEM.

To achieve this goal, the participating agencies have established an integrated, Government-wide effort focused on three scientific objectives.

- o To establish an integrated, comprehensive long-term program of documenting the Earth system on a global scale;
- o To conduct a program of focused studies to improve our understanding of the physical, geological, chemical biological and social processes that influence Earth system processes and trends on global and regional scales; and
- o To develop integrated, conceptual, and predictive Earth-system models.

NOAA's Climate and Global Change Program is a vital component of the U.S. Global Change Research Program (USGCRP) and enables the Agency to bring its unique talents and special capabilities to bear on some of the highest scientific priorities identified by the Committee on Earth Sciences in the USGCRP Research Plan released in the summer of 1989. In support of the stated objectives of the USGCRP and with a special focus on providing reliable assessments and quantitative predictions of climate change and its regional implications, NOAA will pursue the following global change responsibilities:

- o DOCUMENTING GLOBAL CHANGE -- NOAA's planned activities will fill significant gaps in: (i) enhancing operational ocean observations; (ii) implementing a global sea-level monitoring network; (iii) monitoring changes in significant stratospheric constituents like ozone (joint project with NASA);

(iv) developing and testing new measurement technologies; (v) developing important climate and global change measurement products derived from operational satellite (metsats) and **in-situ** observations; (vi) conducting climate diagnostics and analytical studies; and (vii) establishing an effective NOAA and national data and information management system in support of the USGCRP.

o FOCUSED PROCESS STUDIES -- NOAA's research projects are aimed at some of the highest scientific priorities identified by CES and will complement those of the other participating agencies to provide significantly improved understanding of: (i) interannual climate variability through support of planned enhancements to the international Tropical Oceans-Global Atmosphere (TOGA) Program; (ii) the role of ocean circulation and dynamics in climate change, with particular emphasis on the importance of Atlantic Ocean circulation patterns on decadal climate change and the role of the ocean as a sink for atmospheric carbon dioxide; (iii) the sources, sinks, and behavior of greenhouse gases in the atmosphere through NOAA's Radiatively Important Trace Species (RITS) Program; (iv) the importance of dimethysulfide produced by marine organisms as cloud condensation nuclei; (v) clouds, water vapor, and the global hydrological cycle, including NOAA contributions to the evolving international Global Energy and Water Cycle Experiment (GEWEX); and (vi) the effect of climate and related stresses on marine ecosystems.

o CLIMATE MODELING AND PREDICTION -- In response to NOAA's longstanding environmental prediction and information services mission, the FY 1991 proposal ensures significant progress toward: (i) operational ocean modeling; (ii) near-term forecasting improvements to extend operational predictive capability on monthly and seasonal timescales; and (iii) the design and implementation of an effective multi-agency approach to significantly advance climate prediction capabilities on interannual and decadal timescales.

TEMPERATURE INCREASES

QUESTION:

What difference does a one to two degree change in the average temperature make?

ANSWER:

Past climate variations can put such a change in perspective. During the Little Ice Age, a period of protracted global cooling, frost fairs were held on the frozen Thames River in England during winter, and settlements in Greenland were lost to advancing glaciers. Estimated global cooling during this period was only about 1.5°C. Since 1860, a global warming of only 0.5°C. has occurred. A long-term global warming of several degrees is not within recent human experience, but its potential consequences, such as sea level rise, water supply shifts or agricultural impacts, could be quite significant.

NOAA's program will not affect climate change but rather will provide the information to make the best policy decisions on adapting or responding to climate change. It is crucial to know how big the warming will be, when it will occur, and where the regional effects will be most severe. This Program is one of NOAA's highest priorities because the effects of even a one-to-two-degree warming in the next century could be significant as could uncessary or poorly designed mitigation efforts. The cost of developing and making available to national decisionmakers the best possible predictions is modest in comparison.

COASTAL OCEAN SCIENCE

QUESTION:

You're also requesting a program increase to continue the FY 1990 initiative in Coastal Ocean Science. What information do you hope to gain from this multi-year research program, and how much will it cost?

ANSWER:

The FY 1991 request of $17.4 million is $11 million above FY 1990 enacted amount. The need for this modest increase is clear. Over the next decade, federal and state governments will make decisions about the use of coastal and Great Lakes waters and their resources that will determine whether this economically and environmentally important area will continue to be a valuable national resource that provides important goods and services to the Nation.

For example, billions of dollars of both public and private funds will continue to be invested to enact legislation and develop regulations; develop and implement resource management plans; install and operate pollution control equipment and other measures; conduct waste disposal operations; modify the physical environment; monitor and respond to emergency events (such as hurricanes and coastal flooding) and assess and compensate for their damages.

The information currently available to make these decisions remains incomplete and often inadequate and inaccessible to appropriate levels of government and the private sector. As a result, most decisionmakers and scientists continue to address specific problems in selected coastal and Great Lakes areas on a piece-meal basis.

These investments in NOAA will improve the basis upon which the Nation makes its environmental decisions. NOAA's program increases will provide for comprehensive attacks on critical environmental problems and identify and protect coastal resources today and in the future. The programs supported by the increase have been reviewed and developed strategically to both confront today's problems and to invest in the future by putting in place programs and infrastructure to deal with tomorrow's challenges.

WEATHER SERVICE MODERNIZATION

QUESTION:

The NOAA budget includes increases for continuation of the program to modernize the National Weather Service's equipment (NEXRAD and related units). Will the Department maintain all existing public warning and forecast stations until the new stations are operational?

ANSWER:

The FY 1991 Budget includes funding to maintain existing public warning and forecast stations. When the new Weather Forecast Offices assume forecast and warning services with no deterioriation of existing services, current Weather Service Offices will be consolidated.

LANDSAT SIX

QUESTION:

The NOAA budget also includes additional funds for the final part of the LANDSAT 6 remote sensing program. What are the recommendations of the Department to the National Space Council concerning the options for continuing LANDSAT-type data after LANDSAT 6?

ANSWER:

The Departments of Commerce and Defense have jointly developed a Landsat Implementation Options Study for OMB and the National Space Council. This study outlines a series of technical and management/funding alternatives for defining a follow-on land remote sensing program after Landsat 6. The Department has not provided specific recommendations to the National Space Council concerning the alternatives.

GOES REPLACMENT PROGRAM

QUESTION:

I understand that the replacement program for the GOES meteorological satellite will cost some $400 million more than the contractor's original estimate. What is the status of the replacement program, and what action has the Department taken in light of these horrific cost increases?

ANSWER:

The original GOES I-K contract value was $203 million. When GOES L and GOES M were added, the contract value was increased to $276 million. At that time, NASA estimated this contract would cost $403 million; this amount was included in the FY 1988 President's Budget. The cost for the GOES I-M contract included in the FY 1991 budget submission is $606 million.

NOAA, NASA and Ford Aerospace are currently working toward launch of the GOES I satellite in June 1991.

To constrain these costs to the greatest extent possible, NOAA has taken the following actions.

1. NOAA has continued to keep pressure on NASA and the GOES contractor during frequent senior management meetings, in which program status is reviewed and program direction defined.

2. Through a small resident staff at NASA Goddard, NOAA observes and has technical input to most NASA technical contract-related activity.

3. For all purchase orders and task orders issued relative to the contract and supporting activities, NOAA reviews each action in advance.

4. NOAA participates as an observer in all design reviews and other program reviews relative to the contract held at NASA or at contractor facilities.

5. NOAA reviews NASA cost estimates prepared twice each year (NASA program operating plans) and provides budgetary guidance to NASA consistent with available NOAA funds.

6. NOAA participates in Senior Management Reviews held quarterly. These reviews began in 1987, when NOAA expressed strong concern about the status of the program and asked that NASA pay more, high-level attention to the GOES program.

7. NOAA directed NASA to restructure the GOES I-M contract to a fixed-price type contract at the earliest practical date.

8. NOAA developed procedures to work with NASA in making limited performance and performance testing compromises if necessary to reduce cost and improve the probability of obtaining the launch of GOES I at the earliest practical date.

QUESTIONS SUBMITTED BY MR. ALEXANDER

NMFS AQUACULTURE

QUESTION:

For each year 1980 through 1990, please identify the funding appropriated for aquaculture activities at Stuttgart, Arkansas, by total appropriated, total retained at National Marine Fisheries Service, and total allocated to Stuttgart. Please identify construction funding separate from program funding.

ANSWER:

($ in thousands)

FY	Ops.	Constr	Retained	Total by NMFS
80	$157	...	0	$157
81	157	...	0	157
82	157	...	0	157
83	157	...	0	157
84	170	...	0	170
85	375	...	5	375
86	353	...	0	353
87	375	$50	5	425
88	346	937	0	1,283
89	349	937	0	1,283
90	550	1,500	0	2,050

AGRICULTURAL WEATHER

QUESTION:

Agriculture is a basic and essential element of the nation's economy. Farming is extraordinarily vulnerable to weather changes. The National Weather Service agricultural weather services are very valuable and useful to Arkansans and other Americans who produce the nation's food and fiber. Why does the Department consider its responsibility to be responsive to the needs of land-based agricultural producers less important than its duty to respond to the needs of, for instance, marine-based commercial and recreational activities?

ANSWER:

The National Weather Service is responsible for safety-related warning and forecast services that benefit the public as a whole. The Agricultural Weather Services Program benefits a specialized segment of the economy at the expense of the general taxpayer. Furthermore, sufficient skills and expertise exist in the private sector to competitively offer the current services provided the agricultural community by the Federal funded from user fees in the FY 1991 Budget. Beneficiaries of specialized marine services will fund the program.

The National Weather Service (NWS) will continue to issue basic public warnings and forecasts, as well as collect and disseminate observations to cover all areas of the country. This information benefits agricultural operations and is the basis upon which state and private sector entities provide enhanced agricultural weather products.

NEXRAD INSTALLATIONS

QUESTION:

On a year-by-year basis, please identify the geographic locations at which NEXRAD doppler radar installations will be made and the currently scheduled dates for those installations.

ANSWER:

The schedule that was used to exercise the full-scale production option of the Unisys contract, as well as the limited production schedule, is under review. Installation priority is subject to change due to termination of the FAA Interim Terminal Weather Radar (ITWR) development program. Termination of the ITWR NEXRAD development effort does not constitute cancellation of the 17 ITWR redundant NEXRAD units but a restructuring of the delivery priorities for the ITWR NEXRAD units originally planned in the limited and full-scale production deployment schedule. The schedule for NEXRAD deliveries is being revised to reflect this change in priorities. The revised schedule for limited production and the schedule for full-scale production should be completed by the end of April at which time it will be forwarded to Congress.

QUESTION:

Please identify the U.S. Government departments, agencies and other entities which obtain, via NOAA, information or services acquired through the operations of the polar orbiting satellites and the basis on which payment for these is made to NOAA.

ANSWER:

U.S. users of polar information and services include the U.S. Departments of Defense, Agriculture, Commerce, Energy, and Interior. Additional users include state governments, universities, and private sector users. The total number of users is in the thousands. NOAA user services and associated user information listings for the NOAA polar and geostationary satellites are maintained in three general categories.

Direct broadcast from the satellite: NOAA polar orbiting satellites transmit environmental data from space which can be received by any user who has the appropriate ground-receiving antenna and associated electronics. Since the beginning of both the geostationary and polar programs these broadcasts have been provided at no charge to U.S. and international users. This data sharing helps to assure U.S. access to needed environmental data from all other nations. These global data are important in the preparation of U.S. weather forecasts as well as for long-range global climate change studies.

Near real-time delivery after ground-based reception and processing by NOAA: These data are provided primarily to the National Weather Service and other elements of NOAA for environmental forecasting, climate analysis, and research. In addition, some of these near real-time data are made available to the U.S. Navy, the U.S. Air Force and to international users in exchange for other near real-time environmental data important to NOAA. No charges are made for these data. The telephone line distribution system which provides centrally produced satellite images serves NOAA's National Weather Service field offices throughout the United States. For this service, called GOES-TAP, NOAA charges external users a nominal initial fee of $1,000 and, thereafter, $100 annually.

Retrospective delivery after ground-based reception and processing by NOAA: These are the same data produced in near real-time and stored in NOAA's environmental data centers. Charges are made to users to cover the incremental cost of providing the data they have requested. The major users are U.S. Government agencies (70 percent), the U.S. private sector (17 percent), and foreign governments (13 percent).

QUESTION:

Please identify the foreign governments which obtain, via NOAA, information or services acquired through the polar orbiting satellites and the basis on which payment for these is made to NOAA.

ANSWER:

Some of the over 120 countries using this information and service include Algeria, American Samoa, Argentina, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Belize, Brazil, Cayman Is., Brunei, Burma, Cameroon, Canada, Chile, Colombia, Czechoslovakia, Denmark, Dominican Republic, Ecuador, Ethiopia, Federal Republic of Germany, Fiji, Finland, France, Greece, Greenland, Guadeloupe, Guatemala , Guyana , Honduras, Hong Kong, Hungary, Iceland, Iraq, Ireland, Israel, Italy, Japan, Jordan, Korea, Madagascar, Mexico, Mongolia, Morocco, Nepal, Netherlands, Netherlands Antilles, New Zealand, Northern Ireland, Norway, Pakistan, Panama, Paraguay, People's Republic of China, Peru, Philippines, Poland, Portugal, Romania, Saudi Arabia, Scotland, Seychelles, Singapore, South Africa, Spain, Sultantate of Oman, Sweden, Switzerland, Taiwan, Tanzania, Thailand, Trinidad, United Kingdom, Uruguay, and Venezuela. Our user services and associated user information listings for the polar and geostationary satellites for foreign governments are maintained in two general categories.

Direct broadcast from the satellite: NOAA polar orbiting satellites transmit environmental data from space which can be received by any user who has the appropriate ground-receiving antenna and associated electronics. Since the beginning of both the geostationary and polar programs these broadcasts have been provided at no charge to U.S. and international users. This data sharing helps to assure U.S. access to needed environmental data from all other nations. These global data are important in the preparation of U.S. weather forecasts as well as for long-range global climate change studies.

Retrospective delivery after ground-based reception and processing by NOAA: These are the same data produced in near real-time and stored in NOAA's environmental data centers. Charges are made to users to cover the incremental cost of providing the data they have requested. Historically, $10K year (13 percent) of NOAA's retrospective data sales have been to foreign governments.

QUESTION:

Please identify the U.S. government departments, agencies, and other entities which obtain, via NOAA, information or services acquired through the operation of the geostationary satellites and the basis on which payment for these are made to NOAA.

ANSWER:

U.S. users of geostationary information and services includes the U.S. Department of Defense, Agriculture, Commerce, Energy, and Interior. Additional users include state governments, universities, and private sector users. The total number of users is in the thousands. Our user services and associated user information listings for the polar and geostationary satellites are maintained in three general categories.

Direct broadcast from the satellite: NOAA polar orbiting satellites transmit environmental data from space which can be received by any user who has the appropriate ground-receiving antenna and associated electronics. Since the beginning of both the geostationary and polar programs these broadcasts have been provided at no charge to U.S. and international users. This data sharing helps to assure U.S. access to critically needed environmental data from all other nations. These global data are important in the preparation of U.S. weather forecasts as well as for long-range global climate change studies.

Near real-time delivery after ground-based reception and processing by NOAA: These data are provided primarily to the National Weather Service and other elements of NOAA for environmental forecasting, climate analysis, and research. In addition, some of these near real-time data are made available to the U.S. Navy, the U.S. Air Force and to international users in exchange for other near real-time environmental data important to NOAA. No charges are made for these data. The telephone line distribution system which provides centrally produced satellite images serves NOAA' s National Weather Service field offices throughout the United States. For this service, called GOES-TAP, NOAA charges external users a nominal initial fee of $1,000 and, thereafter, $100 annually.

Retrospective delivery after ground-based reception and processing by NOAA: These are the same data produced in near real-time and stored in NOAA's environmental data centers. Charges are made to users to cover the incremental cost of providing the data they have requested. The major users are U.S. Government agencies (70 percent), the U.S. private sector (17 percent), and foreign governments (13 percent).

QUESTION:

Please identify the foreign governments which obtain, via NOAA, information acquired through the geostationary satellites and the basis on which payment for these are made to NOAA.

ANSWER:

Some of the countries using this information and services include Algeria, American Samoa, Argentina, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Belize, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Denmark, Dominican Republic, East Germany, Ecuador, El Salvador, Ethiopia, Federal Republic of Germany, Fiji, France, French Guiana, French Guyane, French West Indies, West Germany, Guatemala, Guyana, Haiti, Hong Kong, Hungary, Israel, Italy, Japan, Jamaica, Kenya, Liberia, Malagasy Republic, Mexico, Morocco, Netherlands, Netherlands Antilles, New Zealand, Paraguay, Peru, Poland, Puerto Rico, Panama, Rep. Du Niger, Rep. of China, Rep. of Korea, Rep. De Cabo Verde, Rep. of Singapore, Seychelles, South Africa, Spain, Sultanate of Oman, Sweden, Switzerland, Tahiti, Trinidad, Turkey, United Kingdom, Uruguay, United Arab Emirates, and Venezuela. Our user services and associated user information listings for the polar and geostationary satellites are maintained in three general categories.

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QUESTIONS SUBMITTED BY MR. EARLY

COASTAL OCEAN INITIATIVE

QUESTION:

Would you briefly summarize the goals of the three program areas of the coastal ocean initiative?

ANSWER:

Improve predictions of coastal ocean pollution and degradation - to predict change in the quality of the coastal environment and its living marine resources to help prevent further habitat degradation and restore damaged habitats.

Improve conservation and management of living marine resources - to predict the influence of fishing, habitat degradation, and natural forces on living marine resources to ensure optimal productivity for today and in the future and to help establish a good balance between economic and ecologic productivity.

Improve protection of life and property in coastal areas - to predict the occurrence of natural physical impacts, for both short-term warnings and long-term planning to prevent or minimize adverse effects of storms and erosion on coastal communities.

QUESTION:

The budget justification indicates that NOAA is integrating base programs with this initiative. Would you explain how this is being done? Are existing programs or activities being absorbed within this initiative?

ANSWER:

The Coastal Ocean Program (COP) is directed out of NOAA headquarters through the Coastal Ocean Program Office within the Office of the Chief Scientist. The projects funded through the Coastal Ocean Science line item are thoroughly reviewed and analyzed by the Coastal Ocean Council (comprised of representatives from all NOAA line offices) and the Assistant Administrators, with final approval by the Under Secretary. These projects are implemented by the appropriate NOAA line office.

COP funds are used to both support and strengthen ongoing NOAA programs (e.g. National Status and Trends, Ocean Assessments, Sea Grant, CZM) in the context of COP goals and to initiate new projects in response to National needs (e.g., nutrient over-enrichment, wetlands and seagrass habitat research and restoration, CoastWatch). However, even in the cases of new program emphasis, COP funds and program management processes use existing NOAA

programs, infrastructure, and interagency and academic community relationships to implement the programs. The mechanisms of COP program management allow NOAA to capitalize on strengths and talents throughout the agency without reorganizing and creating new formal structures.

QUESTION:

For FY 1991, NOAA is requesting an increase of $11 million for the coastal ocean initiative. Why is this increase necessary and how will these additional funds be used?

ANSWER:

The FY 1991 requested increase of $11 million is only $5 million above the President's FY 1990 request. The need for this modest increase is clear. Over the next decade, federal and state governments will make decisions about the use of coastal and Great Lakes waters and their resources that will determine whether this economically and environmentally important area will continue to be a valuable national resource that provides important goods and services to the Nation.

For example, billions of dollars of both public and private funds will continue to be invested to enact legislation and develop regulations; develop and implement resource management plans; install and operate pollution control equipment and other measures; conduct waste disposal operations; modify the physical environment; monitor and respond to emergency events (such as hurricanes and coastal flooding) and assess and compensate for their damages.

The information currently available to make these decisions remains incomplete and often inadequate and inaccessible to appropriate levels of government and the private sector. As a result, most decisionmakers and scientists continue to address specific problems in selected coastal and Great Lakes areas on a piece-meal basis.

These investments in NOAA will improve the basis upon which the Nation makes its environmental decisions. NOAA's program increases will provide for comprehensive attacks on critical environmental problems and identify and protect coastal resources today and in the future. The programs supported by the increase have been reviewed and developed strategically to both confront today's problems and to invest in the future by putting in place programs and infrastructure to deal with tomorrow's challenges.

QUESTION:

How much is NOAA allocating for this program in FY 1990?

ANSWER:

NOAA's Coastal Ocean Program budget in FY 1990 is $6.4 million. This will go towards both enhancing existing programs (such as National Status and Trends, Ocean Assessments, and Coastal Zone Management) and initiating new activities to help meet program goals.

QUESTION:

What portion of FY 1990 and FY 1991 funds will be used for intramural and extramural activities ?

ANSWER:

In both FY 1990 and FY 1991, NOAA anticipates about 30-40% of the Coastal Ocean Program research funds will be used for extramural activities, primarily academic research.

QUESTION:

What process or procedure does NOAA use to award funds for activities conducted extramurally ?

ANSWER:

NOAA's Coastal Ocean Program awards funds for extramural activities based upon the results of a rigorous scientific peer review of the proposals submitted.

COASTAL ZONE MANAGEMENT

QUESTION:

The President's budget proposes a $4.9 million decrease for the coastal zone management program. Why are you proposing this decrease and what impact will it have on State Coastal Zone Management programs?

ANSWER:

We anticipate that enactment of the Administration's CZM reauthorization proposal will result in stronger state programs as states are encouraged to allocate more through the competitive nature of the new grant program.

QUESTION:

What changes are being proposed for the CZM Reauthorization?

CZM funds are currently awarded on a formula basis. I understand that NOAA is proposing that CZM funds be awarded on a competitive grant basis. How would this work?

What impact would a shift to competitive grants have on state CZM programs?

What evidence does NOAA have that competitive grants will result in better management of state coastal resources?

ANSWER:

It is anticipated that competitive grants will result in better management of state coastal resources by ensuring a better allocation of funding. Twenty-nine states, or 94 percent of the Nation's coastline have operational programs that are federally approved; therefore, under the competitive grants program, states will be encouraged to concentrate greater efforts on meeting a set of high-priority national objectives. These national objectives will be developed and reviewed by an independent team of specialists from various specialties.

States will compete for grant funds. The competitive process will cause states to enhance their current programs and to strive for excellence.

SUPERCOMPUTER UPGRADE

QUESTION:

What is the status of the supercomputer upgrade project?

ANSWER:

The Department of Commerce awarded a contract on December 31, 1989 to Cray Research Corporation for the delivery of two Cray YMP8/386 Computer systems. The first of the systems was delivered to the National Meteorological Center (NMC) on February 26, 1990 with the second to be delivered to the Geophysical Fluid Dynamics Laboratory at Princeton, during April 1990. The NMC began system acceptance tests in the middle of March 1990.

NMFS FIELD OPERATIONS

QUESTION:

The NOAA budget proposes $4 million in field structure savings as a result of the closure or consolidation of NMFS field operations. Why are you proposing this consolidation?

Which facilities will be closed?

Which facilities will be consolidated?

ANSWER:

The proposed projected savings for this consolidation was based on a recent review of the laboratory facilities in the NMFS Northeast Region. The purpose of the consolidation is to enhance the effectiveness of NMFS' laboratory field structure, in order to better support fisheries programs. NOAA has formed a NMFS task team to conduct a nationwide study of NMFS laboratory facilities, and when the study is completed the specific consolidation plan will be developed based upon the results of the nationwide study.

QUESTION:

I understand that a review of the fisheries research laboratory structure is presently underway. If this is the case, why are you proposing to close and/or consolidate facilities before the results of this study are known? How do you know that there will be any savings? Isn't this putting the cart before the horse?

Is NOAA conducting this review? When will this study be completed?

What criteria are being used in this study to determine whether or not a facility should be closed or consolidated with another?

The budget justification seems to indicate that changes in field operations will be made to fit the projected savings. Are you being required to back into this $4 million savings figure? Will changes be made regardless of the results of this study to meet this target savings estimate?

ANSWER:

The specific facilities to be closed or consolidated are not known at this time. The task team reviewing the facilities will recommend specific facilities to be closed or consolidated in its report which is expected to be completed by July of 1990.

QUESTION:

Why is NOAA proposing to eliminate funds for the management of Georges Bank Fisheries?

The justification indicates that high priority work will continue. How will this work be continued and who will pay for it?

ANSWER:

NOAA has been successful in supporting the implementation of national/international management schemes to mitigate the rapid decline in the New England groundfish stocks, and to deal with the transboundary issues for Georges Bank stocks. This funding is no longer necessary. High priority cooperative work with the Canadian government on Georges Bank Fisheries base programs will continue through existing U.S.-Canadian agreements.

QUESTION:

The budget request indicates that the NOAA fisheries research lab at Gloucester will be closed. Why are you proposing to close this lab? Is this an indication that NOAA has already made decisions about facilities closures, even though you've indicated that a study is currently underway?

ANSWER:

The proposed closure of the Gloucester lab relates to the reduction in the NMFS product quality and safety program, not the proposed laboratory consolidation savings. This reduction is requested on the basis that research undertaken in this area directly benefits the seafood industry, and, as such, all costs should be offset by the private sector. The decision on specific laboratory consolidations will be made after the nationwide laboratory review is completed.

SEA GRANT

QUESTION:

The budget request proposes a $14.8 million decrease in the Sea Grant program for FY 1991 . Why is this reduction being proposed? What activities will be eliminated? What effect will this reduction have on the Sea Grant program?

ANSWER:

The Administration is proposing to terminate the $14,800,000 Federal funding of the National Coastal Resources Research and Development Institute (NCRRDI) ($1,200,00), the U.S./Asia Aquaculture Science Exchange Program ($282,000) and the Sea Grant Marine Advisory Service (MAS) Agents ($13,300,000). Generally, MAS Agents represent local interests and should be supported by local resources. If the state support for the Agents is forthcoming, there will not be a significant impact on the Sea Grant Program.

QUESTION:

The budget request indicates that the Sea Grant program is important to the coastal ocean program. If this is the case, why are you proposing to decrease funds?

ANSWER:

Again, the proposed reduction in Federal funds for Sea Grant is limited primarily to the MAS Agent Program. It is anticipated that research will not be significantly affected. Assuming separate funding for the Coastal Ocean Program, no impact on that program is envisioned.

QUESTION:

The justification indicates that this program will be restructured. What do you have in mind? How are you planning to change the program?

ANSWER:

Restructuring of the Sea Grant Program has already been accomplished over the last 10 years by developing the program along national instead of local needs, thereby positioning Sea Grant to be more central to NOAA's mission. This has been done in consultation with the Sea Grant community.

QUESTION:

Would you summarize the role the Sea Grant program will play in the coastal ocean initiative.

ANSWER:

The Sea Grant Program has been and will be an active participant in the estuarine research, habitat restoration, and coastal ecosystem research portions of the Coastal Ocean Program. This includes involvement of Sea Grant directors and researchers in planning and implementing these programs.

SES PAY RAISES

QUESTION:

What is the cost of the January 1990 pay raise and the Senior Executive pay raises for NOAA?

ANSWER:

	COST	
January 1990 Pay Raise:	$10,307,799	OR&F
	278,642	SENIOR EXEC
	1,127	FCF
	3,809	FVGDC
	21,326	FFOF
	127,000	WCF
	$10,739,703	TOTAL

QUESTION:

How do you propose to absorb this requirement?

ANSWER:

We absorbed this by reducing lower priority travel, purchases of supplies and equipment, and other discretionary administrative costs.

QUESTION:

What programs or activities will be affected by the absorption?

ANSWER:

All of NOAA Programs except for these eighteen.

Coastal Ocean Sciences

Ocean Management
Estuarine Research Program
Grants To States
Undersea Research Program
Central Forecast Guidance
Atmospheric & Hydro Research
Public Warning & Forecast System
Orbiting System

Financial Services Program

Climate & Global Change
National Climate Program

Geostationary System
Landsat Commercialization

NOAAPort
Sea Grant Programs
Maintenance
Facilities Consolidation

QUESTION:

Does your FY 1991 budget request provide for the full cost of these pay raises or do you have to absorb a portion?

ANSWER:

The FY 1991 budget provides for the full cost of the FY 1990 pay raise. NOAA, as well as all other Commerce components, will absorb half of the costs of the FY 1991 General Schedule and Senior Executive Service pay raises.

QUESTION:

What is the amount of sequester for NOAA?

ANSWER:

A total of $824,000 was sequestered in NOAA in FY 1990. This includes a total of $382,000 in 401(c)/offsetting collections sequestered in the: Operations, Research and Facilities ($160,000), Coastal Energy Impact Fund

($73,000); Federal Ship Financing Fund ($102,000) and Promote and Develop ($47,000) appropriations. In addition, the Fisherman's Contingency Fund ($2,000); Foreign Fishing Observer Fund ($23,000) and Aviation Weather Trust Fund ($417,000) were also sequestered.

QUESTION:

Does NOAA recoup this amount in its FY 1991 budget request?

ANSWER:

The Section 401(c)/offsetting collection sequesters did not affect the FY 1991 budget. The sequester affecting the Fisherman Contingency Fund, Foreign Fishing Observer Fund, and Aviation Weather Trust Fund appropriations were not restored through the FY 1991 budget, consistent with the intent of P.L. 99-177.

QUESTION:

The budget request includes 50% of the proposed January 1991 pay raise, as well as the next phase of the SES pay raise and requires the absorption of the other 50%. What is the total estimated cost of these raises?

ANSWER:

The total estimated costs for the FY 1991 General Schedule and SES payraises in the Operation, Research, and Facilities appropriation is $13,506,000.

QUESTION:

How do you plan to absorb the balance of the cost?

ANSWER:

We will absorb this by reducing lower priority travel, purchases of supplies and equipment, and other administratively controllable costs as required.

QUESTIONS SUBMITTED BY MR. DWYER

NATIONAL UNDERSEA RESEARCH PROGRAM

QUESTION:

Once again, the Administration has slated the National Undersea Research Program (NURP) for elimination. What was NOAA's initial recommendation to the Department of Commerce for NURP for FY 1991? What was the Department's recommendation to OMB?

ANSWER:

NOAA's initial recommendation to the Department of Commerce for NURP for FY 1991 was $7 million. The Department recommended $7 million to OMB.

QUESTION:

Please summarize some of the major accomplishments and studies the NURP program has successfully completed in the last five years.

ANSWER:

Examples of NOAA accomplishments are provided below:

- Collected baseline information at two proposed scrubbed-brine waste disposal sites on the slopes of the Johnston Atoll resulting in the cancellation of dumping activities because of expected adverse environmental effects at the proposed sites.
- Conducted deep water metabolic studies on the Sand Island Sewer Outfall (Oahu, Hawaii) that showed that mircrobiota in the vicinity of the outfall effectively recycle the waste material and the area is surprisingly unpolluted.
- Provided the long-term measurements necessary to model and then predict the global consequences of seafloor venting.
- Investigated the fate and transport of organic pollutants in the Great Lakes showing that the adsorption of contaminants onto particles in the water column, followed by rapid settling of the particles to the lake bottom, was the major control on pollutant behavior in Lake Superior.
- Discovered stocks of a deep-water shrimp in Hawaiian waters and steps are now underway by NMFS to determine the potential for a new deep-sea commercial fishery.

- o Discovered populations of deep-water crab in the South Atlantic Bight and determined through research that a new commercial fishery could be supported.
- o Continued to define and assess the potential for mining cobalt enriched manganese oxide crusts on seamounts in the Hawaiian Archipelago.
- o Studied the life history of queen conch and grouper, two heavily exploited species in tropical waters, and developed a technique for successfully seeding juvenile conch, which will enable stocks to be restored and cultivated.

QUESTION:

Does NOAA believe that NURP plays a fundamental role in providing research for ocean coastal programs?

ANSWER:

No. NURP provides platforms that are used in certain undersea research projects, but NURP itself does not play a fundamental role in coastal ocean research. This fundamental role is played by NOAA's Coastal Ocean Program. Through this initiative NOAA sets coastal ocean research priorities based on scientific and programmatic needs, rather than gearing research project to fit particular research instruments. Funding is available through this initiative to acquire the use of underwater research platforms if they are necessary to meet NOAA's research priorities.

QUESTION:

Does the Department of Commerce believe that NURP plays a fundamental role in providing research for ocean coastal program? Does OMB?

ANSWER:

The Department of Commerce and OMB agree with the NOAA position that the Coastal Ocean Program initiative provides the best framework for determining and funding the undersea research to meet needed coastal program objectives.

QUESTION:

Does the Environmental Protection Agency (EPA) utilize studies and research executed by NURP?

ANSWER:

Yes. The following is a list of NOAA-suported research studies whose results were used by the EPA:

- Baseline data of proposed scrubbed-brine waste disposal sites at Johnston Atoll;
- Metabolic studies on deep-water sewer outfall at Sand Island, Oahu, Hawaii;
- Effects of UV-B radiation on DNA;
- Fate and effects of pollutants in Great Lakes waters;
- Effects of dumping activities on biological processes at the 106-mile dumpsite off New Jersey.

QUESTION:

If adequately funded, what significant role could NURP play in the future of climate and global change, and oceanography?

ANSWER:

As stated above, NOAA believes it is more appropriate to set its research priorities based on scientific and programmatic needs. Therefore in FY 1991, NOAA's Climate and Global Change and base ocean programs will fund the use of undersea research platforms if they are necessary to meet program objectives.

QUESTION:

How might this research embellish upon the mission of the Clean Water Act?

ANSWER:

The Administration does not see a need for NURP to embellish upon the mission the Clean Water Act.

QUESTION:

Describe research and strides NURP is involved with in the area of interpreting the effects of dumped sewage sludge, ocean waste disposal, and water quality.

ANSWER:

A multidisciplinary, multiagency/institution program is now looking not only at the 106-mile site but also at regions to the northeast, west, and southwest to identify gradients (if any) in pollutant transport stemming from 106-mile dumpsite activities. To test the hypothesis that sewage dumped at the sea surface at 106 does not reach the seafloor, NOAA has used a variety of tools and systems to observe, sample, and measure the water column, sea floor, and benthic communities.

Also, metabolic studies were conducted at the Sand Island Sewer Outfall in association with the EPA. This was the first such study to address the effects of deep-ocean sewage disposal by examining effects of community metabolism. Light and dark domes equipped with recording instruments to monitor respiration, photosynthesis, and nutrient enrichment of the environment were placed on the seabed at various distances from the outfall. Results of this work indicate that the microbiota in the vicinity of the outfall effectively recycle the waste material and that the area is surprisingly unpolluted.

One additional example is the cycling of pollutants in Lake Superior. Lake Superior provides a major source of drinking water for midwestern communities. NOAA's research indicates that a significant element involved in determining the chemical-exchange process from transport of organic pollutants in the water column to the bottom sediment is the fluff layer. This is a zone of intense biological activity where chemicals bind to a desegregated, highly fluid mixture of fine particulate matter. The fluff layer is difficult to collect because of its physical characteristics. NOAA developed a fluff-layer sampler that samples quantitatively with the use of submersibles. Results of sampling show that particulate organic matter is rapidly degraded in the fluff layer and largely unincorporated into underlying sediments. Consequently, the internal cycling of particles and organic matter in the fluff layer significantly affects the behavior and residence time of nutrients and contaminants in the water column of large lakes.

QUESTION:

Specifically, what kinds of reserves have you been able to devote to this area in each of the last three years?

ANSWER:

NURP resources devoted in each of the last three years to ocean dumping, waste disposal, and water quality are:

1988 - $175K
1989 - $1,375K
1990 - $2,400K

These funds include direct support for science and facilities, such as Remotely Operated Vehicles (ROV's) and submersibles.

QUESTION:

What additional and necessary research would you conduct in this area with additional resources? (provide estimates)

ANSWER:

No additional resources are necessary. The program will be terminated in FY 1991. High priority services provided from this program to other NOAA programs will be continued within available funding levels. For instance, the Coastal Ocean Program and Climate and Global Change Program may fund undersea research necessary to meet their objectives.

QUESTION:

Describe research strides you are making in the area of coral which provides insight into records of climate change over past centuries.

ANSWER:

NOAA research has demonstrated the potential for paleoclimate information based on proxy data from corals. The data include information on temperature, sedimentation, water movement, and radioactive carbon levels. In addition, research on calcification and growth rates of coral are used to validate coral growth bands. Finally, a remotely operated coral coring device is being developed to improve the length and quality of the record collected and to make more and deeper habitats available for sampling.

QUESTION:

How is eliminating NURP consistent with President Bush's desire to be the "environmental President" and his commitment to understanding, protecting, and preserving our environment as stated by Dr. Knauss before this committee?

ANSWER:

Understanding, protecting, and preserving the environment are clearly supported by the President's budget request for NOAA. The Coastal Ocean Program and Climate and Global Change will continue to fund research employing underwater research platforms as necessary to meet their program objectives. These emerging large scale environmental programs provide the multidisciplinary framework necessary to address national environmental issues. The NURP program is limited by its focus on underwater research platforms. The President's commitment is more effectively met through programs that address these large scale environmental issues rather than programs that focus on a particular means to conduct research.

QUESTIONS SUBMITTED BY MR. CARR

ZEBRA MUSSEL

QUESTION:

It is widely acknowledged that information, education and outreach programs will play a key role in controlling the spread and impact of the zebra mussel. However, the Administration's proposed budget calls for zero funding of the Marine Advisory Service program within Sea Grant. How will NOAA accommodate this need?

ANSWER:

The Administration's proposed budget does not call for zero funding of the Marine Advisory Service (MAS) Program. The MAS Program includes Specialists and Agen~~ts. The~~ MAS Agents, who typically are stationed in various coastal counties, serve as information/ technology extension personnel. The MAS Specialists engage in applied research relevant to NOAA's mission. The FY 1991 budget provides for zero Federal funding of the MAS Agents only, not the Specialists. It is anticipated that state and local funding for the Agents will be available, thus, allowing the Sea Grant MAS Program to continue as before.

GREAT LAKES ACTIVITIES

QUESTION:

NOAA's Great Lakes Environmental Research Laboratory is responsible for modeling Great Lakes Ecosystems. How closely does GLERL cooperate with the U.S. Fish and Wildlife Service to incorporate fisheries information into those models? Is the current level of cooperation between the two agencies sufficient to address zebra mussel issues?

ANSWER:

Joint research between GLERL and the U.S. Fish and Wildlife Service (USFWS) focuses on improving predictions of the year-class dynamics of forage fish that support a $2-4 billion per year salmon fishery. GLERL is coordinating the planning and field work with the USFWS' National Fisheries Center-Great Lakes in Ann Arbor, Michigan, so that the dynamics and variability of an entire ecosystem, from microbes to adult fish, can be explained. GLERL is also coordinating proposed research on the zebra mussel with the USFWS. Cooperation, communication, and exchange of data at both the scientific and managerial levels between the U.S. Fish and Wildlife Service and GLERL is excellent.

QUESTION:

NOAA has an important role in upholding U.S. obligations under the 1909 International Boundary Waters Treaty and the 1954 Convention on Great Lakes Fisheries. The environmental and economic impact of the zebra mussel is a binational one and touches upon both of these agreements with Canada. Given the Administration's proposed budget, is NOAA in a position to help meet international obligations under these agreements?

ANSWER:

GLERL staff participated in the joint IJC/Great Lakes Fishery Commission Workshop on Exotic Species and the Shipping Industry, February 28-March 2, 1990. NOAA is able to support the IJC through participation on boards and committees within the President's FY 1991 funding request.

QUESTION:

What is NOAA's working relationship with the Great Lakes Fishery Commission as it relates to sea lamprey control? How will this relationship be strengthened and expanded to address other exotic species - principally the zebra mussel?

ANSWER:

The NMFS role is limited to participation in the committee of the whole of the Great Lakes Fishery Commission. This role consists of providing advice and guidance when requested, but does not involve an active program participation. NMFS does not propose to be programmatically involved with exotic species of the Great Lakes. Both the Great Lakes Environmental Research Laboratory and the Great Lakes Sea Grant Colleges, however, will be working with the Great Lakes Fishery Commission and other parties to address the issues related to exotic species, such as the zebra mussel, in the Great Lakes.

QUESTION:

Although NOAA has gone on record in support of a GLERL research initiative to examine the ecological effects of the zebra mussel in the Great Lakes, the Administration's proposed budget calls for the laboratory's operating budget to cut by 25%. Do you expect GLERL to do more with less? How do you expect GLERL to assume such new responsibilities with fewer resources? Did NOAA or the Commerce Department file a reclama with OMB regarding the proposed reduction in GLERL's FY 1991 base budget?

ANSWER:

The President's Budget provides sufficient funds to meet NOAA's priorities and material needs in Great Lakes research.

QUESTION:

The zebra mussel is expected to impose enormous costs on public, corporate, and individual users of Great Lakes resources. Can you provide some estimate of such costs and then compare them with current federal funding for NOAA Great Lakes research programs?

ANSWER:

The zebra mussel is a very recent invader into Lake St. Clair, Lake Erie, and more recently, Lake Ontario. At present it is experiencing a tremendous population explosion. We have no verified records of its spread to other lakes nor are we certain the population explosion will continue. Consequently, it is almost impossible to make realistic estimates of costs that users of the lakes may incur in attempting to mitigate damages. Some municipal water intakes have been clogged, some industries have reduced water supplies, recreational boats have been damaged, and fisheries' managers are faced with possible destruction of spawning beds and potential collapse of major fisheries. Millions of dollars will be required to install new water intakes, for control at power plant intakes, and retrofitting of cooling systems on boats. Estimates of $1 billion to $4 billion have been made just for economic impacts in one of the five lakes, Lake Erie. The Walleye fishery in Lake Erie, for example, is valued at $900 million per year--it could collapse due to the zebra mussel. Furthermore, it most probably is only a matter of time before the mussel gains access to the other lakes. Funding for NOAA Great Lakes Environmental Research Laboratory is $4.8 million in FY 1990. NOAA Sea Grant research and advisory services in the Great Lakes are budgeted at $7.1 million in FY 1990, and NOAA's National Undersea Research Program supports submersible research in the Great Lakes every other year at a cost of about $1 million.

QUESTION:

The zebra mussel will eventually spread throughout temperate freshwater bodies throughout the U.S. How does NOAA's research plan to address this threat?

ANSWER:

We do anticipate that the zebra mussel will spread throughout much of temperate North America since it is known to survive for 14 days out of water. It can therefore be easily transported when attached to small boats. It can also spread by movement through diversions and canals. The NOAA research plan includes studies: (1) of the zebra mussel's life history to find weak links which may make it vulnerable to control (GLERL), (2) of the experience of northern Europeans in dealing with the organism (GLERL), and (3) on surfaces which may inhibit their attachment (Sea Grant).

QUESTION:

Research is needed to assess the impact of exotic species, particularly the zebra mussel, on the ecology of the Great Lakes. The introduction of this organism could alter the entire food chain and ultimately lead to a decline in game fish and a loss of millions to the sport fishing industry. Why are budget cuts being proposed for GLERL at a time when it is initiating studies to assess the ecological impacts of exotic species?

ANSWER:

Consistent with the need to exercise overall constraint in Federal spending, GLERL's proposed budget of $3.2 million is intended to reflect and support the highest priorities within available funds. The proposed budget will allow GLERL to continue to support: (1) those national activities required to implement research under the U.S.-Canada Water Quality Agreement and (2) a number of other activities that are most central to NOAA's mission.

QUESTION:

Major efforts have been made to examine the cycling and bioaccumulation of toxic chemicals in the Great Lakes. With the introduction of the zebra mussel, pathways for chemical movements through the food chain may be permanently altered. GLERL has been a leader in assessing the movement of those chemicals through the lower food chain in the Great Lakes, yet these budget cuts will prevent any new studies from being initiated. How can these budget cuts be justified?

ANSWER:

Consistent with the need to exercise overall constraint in Federal spending, GLERL's proposed budget of $3.2 million is intended to reflect and support the highest priorities within available funds. The proposed budget will allow GLERL to continue to support: (1) those national activities required to implement research under the U.S.-Canada Water Quality Agreement and (2) a number of other activities that are most central to NOAA's mission.

GLERL

QUESTION:

I am pleased that NOAA finally recognizes the Great Lakes Environmental lab in Ann Arbor, Michigan. However, I am a bit dismayed by the fact that your request is for $1.6 million less than Congress appropriated for this Fiscal Year. What is your justification in cutting the funds for GLERL?

ANSWER:

Consistent with the need to exercise overall constraint in Federal spending, GLERL's proposed budget of $3.2M is intended to reflect and support the highest priorities within available funds. The proposed budget will allow GLERL to continue to support: (1) those national activities required to implement research under the U.S.-Canada Water Quality Agreement and (2) a number of other activities that are most central to NOAA's mission.

QUESTION:

Does NOAA have any plans to fund or even contemplate a Great Lakes Research Coordinating Office? Are there any new studies planned?

ANSWER:

Section 118 of the Water Quality Act of 1987 authorized this program to be funded in the EPA budget. NOAA has no authorization or plans to fund it. As required by Section 118, NOAA has issued a research issues document regarding research needs of the Great Lakes. No other studies are planned.

SEA GRANT

QUESTION:

I am pleased to see that the Commerce Department finally decided to fund the Sea Grant program. What was the justification for the elimination of the Marine Advisory Service agents program?

ANSWER:

The justification for reducing support for MAS is that the Administration considers local entities to be the primary beneficiaries of the Advisory Service programs; thus, it is appropriate for them to provide the support for this part of the Sea Grant Program.

QUESTIONS SUBMITTED BY MR. REGULA

SEA GRANT

QUESTION:

Regarding the National Sea Grant College Program, NOAA proposes a reduction of $13,300,000 and maintains that research programs will be conducted at historical levels. Please outline which programs will be continued and which will be eliminated.

ANSWER:

The only program for which total Federal support will be eliminated is the Marine Advisory Service (MAS) Agents part of the Sea Grant program. The research, education, and MAS Specialists would continue to receive Federal support.

QUESTION:

In dividing National Sea Grant College Program funds between state programs, how are the level of these grants decided? Is there a formula which determines that for example Ohio would receive $550,000 and Wisconsin would receive close to $2 million?

ANSWER:

There is no formula for determining funding levels as that word is commonly understood to mean. However, Sea Grant does have review procedures for determining funding levels. The level of funding is decided by the amount of credible research and extension that is proposed by each college, the amount of money available, and historical funding levels.

QUESTION:

Are National Sea Grant College Program funds currently being used to conduct research on the problem of zebra mussels presently causing problems particularly in Lakes Erie and Michigan? Would the proposed funding level of $27,498,000 allow adequate research into the subject?

ANSWER:

There is limited Sea Grant College research on zebra mussel problems in Ohio, Wisconsin, and New York. The proposed funding will allow this initial research to continue.

QUESTIONS SUBMITTED BY MR. CONTE

ANTARCTICA

QUESTION:

What role does the National Oceanic and Atmospheric Administration (NOAA) play in United States' research efforts in Antarctica?

ANSWER:

National Science Foundation is the lead Federal agency on Antarctic Research. However, in cooperation with other government agencies and the private sector, NMFS has implemented the Antarctic Marine Living Resources (AMLR) program. AMLR is a program of directed research which is defined by the Antarctic Marine Living Resources Convention Act, P.L. 98-623, Title III, which states that, "The Secretary or Commerce, in consultation with the Director of the NSF, the Secretary of State and the heads of other appropriate Federal agencies, shall design and conduct a program of directed scientific research coordinated with the United States Antarctic Program." ALMR is a national program which provides information for U.S. policy relating to the conservation and management of living Marine resources in the ocean areas surrounding Antarctica. AMLR is providing information on the actual and potential impacts of these fisheries on the recovery of depleted populations in relation to the overall structure and functions of the principal components of the Antarctic ecosystem.

In addition, NOAA has a continued presence in Antarctica as the operator of the Geophysical Monitoring for Climatic Change (GMCC) South Pole station, established as one of four baseline observatories to monitor trace gases and particles in the atmosphere. Measurements have been taken at the South Pole since the International Geophysical Year in 1957. The GMCC station is located at NSF's Clean Air Facility at the South Pole. GMCC has instruments at that site to monitor gases (carbon dioxide, methane, surface ozone, vertical ozone profiles, chlorofluorocarbons, nitrous oxide); aerosols; solar/terrestrial radiation; and meteorological variables (air temperature, snow temperature, pressure, wind speed and direction). Researchers from other agencies and universities frequently use the site for cooperative research.

NOAA was a major participant in the research campaigns to investigate the stratospheric ozone "hole" over the Antarctic that was discovered in 1985. During the summer of 1986, NOAA, in conjunction with NASA, NSF, and the

Chemical Manufacturers Association, conducted a ground-based sampling expedition to assess the stratospheric chemistry over Antarctica. In the summer of 1987, a larger scientific party returned for both an airborne and ground-based campaign. These expeditions were highly successful in that the scientists were able to determine the chemical and dynamical processes involved in the dramatic seasonal decrease in stratospheric ozone.

QUESTION:

Has NOAA promulgated regulations over the activities of U.S. citizens in Antarctica?

ANSWER:

Yes. The following are NOAA Antarctic regulations: Legislative Authority; Antarctic Living Marine Resources Act of 1984, PL 98-623, 16 U.S.C. 2431 et seq.

53 FR 8766-8772; Established regulatory authority (re Sec. 307, 16 U.S.C. 2436) and announced procedures to implement CCAMLR Conservation Measures. Codified at 50 CFR Part 380.

53 FR 46872-46874; Implemented CCAMLR Conservation Measures of 1986.

54 FR 4797-4798; Implemented CCAMLR Conservation Measures of 1988.

54 FR 6407-6415; Established Permitting regulations for taking and importing of Antarctic Marine Living Resources.

54 FR 40668-40671; Established CCAMLR System of Observation and Inspection and placed U.S. Flag vessels in its jurisdiction.

The Endangered Species Act (16 U.S.C. 1531-1543) is applicable to activities of persons subject to the jurisdiction of the United States regarding endangered species, including those in Antarctica. Prohibited acts include importation into the United States, "taking" of listed animals, and transportation of endangered species in interstate or foreign commerce in the course of commercial activities.

Principal implementing regulations are found at 50 C.F.R. Parts 217, 220, and 222. The Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407) and the Whaling Convention Act of 1949 (16 U.S.C. 916l) also apply to certain activities of persons subject to the jurisdiction of the United States regarding regulated species in Antarctica. Principal implementing regulations regarding marine mammals are found in 50 C.F.R. Subchapter C; those concerning whaling are found in 50 C.F.R. Subchapter D.

QUESTION:

Do you see any conflict between the National Science Foundation's (NSF) authority under the Antarctic Treaty Act and NOAA's authority to regulate tourism of U.S. citizens as proposed under H.R. 3977, the Antarctic Protection and Conservation Act of 1990?

ANSWER:

Several of these questions relate to the position of the Department of Commerce on provisions of H.R. 3977. The Department is carefully considering this legislation, but has not yet developed a formal position on H.R. 3977, nor had the opportunity to consult with other interested agencies concerning H.R. 3977 and its implications. The following answers relating to this bill are therefore preliminary responses which will be revised and refined in further Departmental consideration of H.R. 3977. In response to this question, there is a potential for confusion concerning the relationship between Section 5 of H.R. 3977 and the Antarctic Conservation Act, particularly regarding protection of flora and fauna, disposal of pollutants, and protection of specially protected areas or sites of special interest (see e.g., 16 U.S.C. 2403-05).

QUESTION:

Which agency, NOAA or NSF is better suited to provide regulatory oversight to U.S. activities in Antarctica, particularly tourism?

ANSWER:

This is a question which has not yet been fully addressed within the Department and within the Administration. Both agencies have expertise concerning Antarctica and the issues of particular concern in Section 5 of H.R. 3977. However, issues concerning the potential scope of the regulatory responsibility, and the relative regulatory and enforcement capability of the agencies have not yet been addressed.

QUESTION:

Do you believe the provisions of NEPA currently apply to the activities of U.S. agencies in Antarctica?

ANSWER:

With the issuance of Executive Order No. 12114, pertaining to the environmental effects of actions abroad and made specifically applicable to Antarctica, NOAA has focused more attention on realizing the objectives of NEPA, in both the domestic and international contexts, than on the legal question of whether NEPA applies. At least since 1984, NOAA Directives have, with limited exceptions, made the environmental review and assessment procedures implementing NEPA applicable to major actions significantly affecting the environment of the global commons and to other categories in the Executive Order. In 1984, NOAA prepared a framework environmental assessment on issuance of the regulations implementing the Antarctic Living Marine Resources Convention Act. In the international context, NOAA has supported initiatives whose objectives involved assuring that nations, in addition to the United States, assess environmental considerations and take these into account in their Antarctic activities. Principal among these is Recommendation XIV-2 (of the Antarctic Treaty Consultative Meeting), which recommends to Governments that their respective national organizations responsible for Antarctic activities evaluate, in the planning process, the environmental impact of such activities in accordance with procedural guidelines set out in the Recommendation. These procedures contain components similar to NEPA, including preparation of "Initial Environmental Evaluations" and "Comprehensive Environmental Evaluations" for activities involving more than transitory or minor environmental effects. Elements for consideration in the evaluation are set out, and the guidance includes provision for comment by interested parties and monitoring of key indicators of environmental effects. This Recommendation has been approved by the United States; countries generally treat Recommendations as if in force until formally approved by the Governments of the Consultative Parties.

QUESTION:

Do you believe the provisions of NEPA apply to any of the activities of U.S. citizens in Antarctica?

ANSWER:

With the issuance of Executive Order No. 12114, pertaining to the environmental effects of actions abroad and made specifically applicable to Antarctica, NOAA has focused more attention on realizing the objectives of NEPA, in both the domestic and international contexts, than on the legal question of whether NEPA applies. At least since 1984, NOAA Directives have, with limited exceptions, made the environmental review and assessment procedures implementing NEPA applicable to major actions significantly affecting the environment of the global commons and to other categories in the Executive Order. In 1984, NOAA prepared a framework environmental assessment on issuance of the regulations implementing the Antarctic Living Marine Resources Convention Act. In the international context, NOAA has supported initiatives whose objectives involved assuring that nations, in addition to the United States, assess environmental considerations and take these into account in their Antarctic activities. Principal among these is

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QUESTION:

Does NOAA consider that other major environmental laws, such as the Clean Water Act, Clean Air Act, and the Resource Conservation and Recovery Act (RCRA) apply to its activities in Antarctica? If not, why not? Does NOAA oppose their application in Antarctica? Why, or why not?

ANSWER:

NOAA is not aware that any agency has fully addressed the complex issues involving applicability of these statutes to Antarctic activities; NOAA has neither opposed nor asserted their applicability. Generally speaking, NOAA considers that the environmental protection afforded Antarctica should be at least that afforded in the United States; however there are valid issues on how this objective is to be achieved. NOAA has supported efforts to achieve environmental objectives internationally, and considers that solid progress in this regard was made at the recent Consultative Party Meeting, particularly in the areas of marine pollution and waste disposal. From this point of view, NOAA is also actively participating in preparations for the November meeting on comprehensive measures for protection of the Antarctic environment.

QUESTION:

With respect to Section 5 of H.R. 3977, what opportunities do you see for the government to charge user fees to cover the costs of regulating tourism?

ANSWER:

The Department has not yet completed analysis of the potential scope of Section 5; therefore it is difficult to assess the opportunities for user fees other than to say it depends upon the extent to which implementing regulations call for government provision of information or services for the benefit of individuals, as opposed to measures for the benefit of the general public. If implementation involves permitting, which is unclear, some proportion of those costs might be recoverable; the same may apply to inspection measure or individual training.

QUESTION:

Assuming H.R. 3977 was enacted as introduced, would the federal government require further statutory authority to charge user fees? Please submit such language.

ANSWER:

It would be preferable to include specific authority to charge user fees. Although general authority is found in 31 U.S.C. 9701, gray areas between public and individual benefit could be eliminated by a specific provision. The specific provision should be broad enough to cover all potential user fee areas (to avoid the inference that fees for activities not covered are precluded). Because further discussion of the scope of Section 5 is necessary, provision of language is not feasible at this point.

QUESTIONS SUBMITTED BY MRS. BOGGS

WETLANDS POLICY

QUESTION:

What role does NOAA plan in the effort to meet the President's policy goal of "no net loss" of wetlands? How is NOAA attempting to meet that goal?

ANSWER:

In early 1989, the President established an Interagency Task Force on Wetlands in the Working Group on Environment, Energy, and Natural Resources under the Domestic Policy Council. NOAA represents the Department of Commerce on the Task Force and has established a NOAA Inter-Line Office group on wetlands, chaired by the National Marine Fisheries Service (NMFS). NOAA, acting through NMFS' National Habitat Conservation Program, is involved routinely in all Federal decision-making for any projects, programs or policies which otherwise would adversely affect living marine resources or their habitats. NOAA also conducts research directed at understanding the functional importance of wetlands and other habitats to living marine resources and the effects of costal degradation, pollution and alteration of freshwater inflows to estuaries. Augmentation of this management and scientific capacity to address coastal issues, is the focus of NOAA's emerging Coastal Ocean Program, which employs a comprehensive multidisciplinary partnership between NOAA, states, and academia to solve national coastal problems with improved information on the effects of degradation of natural systems.

QUESTION:

The Corps of Engineers and the Environmental Protection Agency have recently reached agreement on a Memorandum of Agreement governing the Section 404 permit program. What impact will this agreement have on NOAA's wetlands activities?

ANSWER:

We assume that the agreement referenced is that signed on February 6, 1990, regarding the determination of mitigation under the Clean Water Act's Section 404(q) Guidelines. NOAA supports fully this agreement. The MOA is important because it clarifies the existing roles of the EPA and the Corps in achieving the Act's objective of maintaining the chemical, physical, and biological integrity of the Nation's waters including wetlands. We are especially pleased with the statement by the Assistant Secretary of the Army that the agreement's provisions apply equally to Corps of Engineer's projects as well as to permit applicants. We believe also that the existence of this document will not prevent worthwhile and appropriate coastal projects from being approved.

QUESTION:

Last year several Federal agencies issued an Interagency Wetlands Manual. What has the experience at NOAA been in working with the guidelines contained in the Manual?

ANSWER:

The manual was developed for assisting Federal agencies and others in determining areas of jurisdiction, especially in freshwater habitat where wetlands are often difficult to establish precisely. Because NOAA's interests primarily involve tidally-influenced marine and estuarine wetlands, there has been little controversy regarding Federal jurisdiction. We have not experienced serious difficulties in working with the interagency manual.

WETLANDS BUDGET

QUESTION:

The Administration's budget request indicates that it includes $28 million for wetlands programs at NOAA. Please describe these programs and indicate which are new initiatives, if any, rather than the continuation of existing programs.

ANSWER:

NOAA wetlands programs consist primarily of the National Marine Fisheries Service's National Habitat Conservation Program, which is composed of both research on the importance of wetlands to living marine resources and assessment of the effects of man's activities on such habitats. Other wetlands-related NOAA programs involve research and public education programs of the National Sea Grant College Program and support for state wetlands management programs under the Coastal Zone Management Act. New wetlands programs initiatives by NOAA are components of NOAA's Coastal Ocean Program (COP) and includes $4.0 million for FY 1991 enhancement of applied research on the functional importance of seagrass and emergent marsh habitats to living marine resources and estuarine ecosystem functioning as well as initiation of coastal habitat mapping using satellite and aircraft imagery. FY 1990 funding for these COP initiatives totals $1.83 million.

LOUISIANA WETLANDS

QUESTION:

Please briefly describe how NOAA can contribute to efforts to slow the rapid loss of coastal wetlands in Louisiana.

ANSWER:

NOAA's National Marine Fisheries has also been very involved in Federal and State proposals and studies to redirect flows from the Mississippi River into adjacent coastal wetlands. Recently, NMFS was instrumental in overturning a proposed Corps of Engineers' permit for filling, dredging, and isolation of over 100 acres of high quality wetlands on Grand Isle, Louisiana.

QUESTION:

Is there anything in the FY 1991 budget request specifically targeted at that effort?

ANSWER:

No, there are no NOAA funds specifically targeted to wetlands loss in Louisiana, although NOAA's research on wetlands being undertaken through the COP will benefit Louisiana.

MULTIPURPOSE CADASTRE SURVEY

QUESTION:

Funds were included in the FY 1990 appropriation for the continuation of the multipurpose cadastre survey. What is the status of this study? What are its goals? Is adequate progress being made to achieve those goals?

ANSWER:

The three pilot projects in the State of Louisiana are progressing very well.

- o Jefferson Parish has completed its planned tasks for the second year of this program and is now working on the third year plans. It is expected that the FY 1990 funds appropriated for the fourth year of this project will be awarded to the Parish within a few weeks. The fourth year tasks have an approximate April 1, 1990 start date.
- o Calcasieu Parish has completed its second year tasks and is now in its third year. It is expected that the FY 1990 funds appropriated for the fourth year of this

project will be awarded to the Parish within a few weeks, and that the fourth year tasks will start about September 1, 1990.

- Orleans Parish has almost completed its first year tasks, and the FY 1989 funds appropriated for the second year of this project were awarded in March 1989. It is expected that the FY 1990 funds appropriated for the third year of this project will be awarded to the Parish within a few weeks, and that the third year tasks will start about September 1, 1990.

The goal of this study is to provide, through the conduct and documentation of pilot projects at the local level, standards and specifications, guidelines, and detailed procedures for the planning, design, development, and implementation of a land information system.

The Administration has requested a decrease of $1,836,000 for this project in the FY 1991 Congressional Budget Submission. This constitutes the total Federal support for this project. This work should be turned over to the state for completion and should be funded by the state, which is the direct beneficiary.

NATIONAL SHELLFISH INDICATOR STUDY

QUESTION:

Funds were included in the FY 1990 appropriation for research on shellfish water standards. What is the status of this research program and what are its goals?

ANSWER:

Funding ($500,000) has been provided in each of FY 1989 and FY 1990. The FY 1989 funds were awarded to the Louisiana Universities Marine Consortium (LUMCON) to finish the planning for the overall shellfish water quality standards study, establish a data base management system, develop the epidemiological plan, and prepare a preliminary list of field sampling sites. The FY 1990 funds have been awarded to LUMCOM to fund new and/or rapid viral methods development. Viral candidates are those most likely to have methods available for the field studies. The Administration has proposed terminating this effort in FY 1991.

QUESTION:

Recently, there has been significant public interest in the establishment of a Federal seafood inspection program similar to existing agricultural inspection programs.

Would a study of shellfish water standards serve to provide a baseline that could be used to support a seafood inspection program?

ANSWER:

Yes. The continuation of the Status and Trends Program conducted by NOS and the new Coastal Oceans Program, which includes all NOAA line offices, will also contribute to baseline information about particular waterbodies which could be used to support a comprehensive seafood inspection program.

QUESTIONS SUBMITTED BY MR. DICKS

MITCHELL ACT

QUESTION:

Why do the National Marine Fisheries Service and Department of Commerce consistently recommend that no federal funds be provided for this program? Is your Department the source of these recommendations?

ANSWER:

Our position is that the Pacific northwest electrical ratepayers should have the funding responsibility for the operation and maintenance of the Mitchell Act hatcheries.

The reason for this position is that the need for the hatcheries is a direct result of hydroelectric facilities along the river that were installed to provide lower cost electricity to local rate payers. This approach is consistent with the Federal Power Act and the Federal Energy Regulatory Commission implementation of the FPA vis-a-vis other hydroelectric facilities.

The National Oceanic and Atmospheric Administration (NOAA) has prepared and submitted to the last four Congresses, legislation to authorize the Bonneville Power Administration to collect funds to be transferred to NOAA for production and maintenance of the hatcheries.

QUESTION:

Can you provide this committee with an analysis of the contribution of salmon and steelhead originating from Mitchell Act hatcheries to Northwest fisheries, including a precise analysis of the economic value of those fish?

ANSWER:

The attached table was prepared by Robert Z. Smith of the Columbia River Program Office staff. The values are based on a report prepared by NMFS economist, Jack Richards, relative to values in 1980-1984.

ILLEGAL FISHING ENFORCEMENT

Reports continue of illegal fishing activity in the North Pacific and Bering Sea. These include illegally caught salmon with driftnets and the use of the so-called Bering Sea Donut Hole to stage illegal fishing trips in U.S. territorial waters.

QUESTION:

Describe what steps are being taken in research and enforcement measures to respond to this problem.

ANSWER:

Driftnet Research:

NMFS is supporting research to improve methods for identifying the continent, and possibly the nation and river, of origin of all Pacific salmon species. Cooperative research, initiated in 1986, is also being conducted with Japan, Korea, and Taiwan at low levels. This information allows consideration of time-area management schemes for current squid driftnet fisheries to minimize incidental take of salmonids.

Driftnet Enforcement:

Intensified NOAA investigations on the West coast, in Canada, and in the Far East have documented the nature and extent of the illegal salmon interceptions occurring in the North Pacific, as well as worldwide product distribution routes and illegal marketing practices. In October 1988, NOAA developed a high seas salmon interception enforcement plan. To the extent possible given budgetary and policy constraints, NOAA has implemented the plan successfully. Also, pre-season information and planning sessions chaired by NOAA have resulted in increased patrol coverage and increased detection and apprehension of vessels and individuals involved in these illegal practices. This information is also very valuable in negotiating new fisheries agreements and for use by the U.S. delegation to the U.N. in their efforts to bring about a worldwide ban on high seas driftnet fishing.

Bering Sea Donut Hole Research:

In 1987, research was conducted to determine the relationship of pollock found in the Aleutian Basin and those in adjacent regions. The goal was to determine the abundance of pollock in the Basin and determine if Bering Sea shelf and Aleutian Basin fish were members of the same stock. Extensive review of the literature and data was conducted to assist in the development of hypotheses associated with stock structure and population status of Basin pollock.

Resource surveys have been conducted since 1988 to assess the general distribution and biomass of pollock in selected parts of the Basin. Feasibility studies of stock separation were also undertaken. Also, NMFS scientists were placed on board a Polish fishing vessel in the Donut Hole to study and provide descriptions of current operation methods of the fishing fleets.

For FY 1991, NMFS has four budget requests that will expedite the acquisition of information and provide the needed research in the Donut Hole. First, an increase request of $700,000 will provide for the replacement of surveys previously conducted by the Japanese before the Americanization of the groundfish resources of the Alaskan coast. Second, an increase request of $750,000 will support investigative research including life history studies of pollock, biochemical differences in stocks, assessments of ecological and oceanographic factors and the processes that regulate behavior and abundance, and analyses of resource survey and fisheries data bases to improve assessments of the status of stocks and the fisheries. Third, an increase request of $2.0 million is for the entire Alaska Monitoring System involving the collection and handling of commercial fisheries statistics. Fourth, an increase request of $750,000 for Conservation Engineering is to address the issue of "by-catch", or species taken incidentally with other species in the North Pacific and Bering Sea, especially the by-catch which occurs in the Alaska Trawl Fishery.

Bering Sea Donut Hole Enforcement:

The Coast Guard has dedicated a significant portion of their at-sea enforcement resources to the Donut Hole. NMFS special agents accompany as many of these aerial and surface patrols as resources permit. Presently, the Coast Guard averages three to four overflights per week plus cutter patrols in the area. Also, Japan requires all their vessels to carry position fixing equipment and provide location data (which NMFS verifies) from this equipment after each trip.

QUESTION:

Is research proceeding rapidly enough to respond to the demands on the resource?

ANSWER:

Driftnet:

Research to support the prosecution and control of illegal salmon take is on track, but anticipated receipt of baseline salmon stock samples from Asia in 1990 and 1991 will require accelerated research on stock identification techniques.

Research to characterize the distribution of salmon to protect them from incidental take in the northern areas of squid fisheries has been dependent on foreign research vessels. If this situation continues, there will be no U.S. directed field research on this topic in 1990/1991.

Regarding the suite of North Pacific species taken incidentally in driftnet fisheries (marine mammals, birds, turtles, tunas, billfishes, sharks, etc.), it is impossible to judge the status of those resources at this time. It is not unreasonable to assume that some of these populations are in serious decline. The current Driftnet Program will estimate the by-catch rates in driftnets, but will not take status of stock assessments for many years.

Bering Sea Donut Hole:

Research to determine the impact of illegal fishing will require accelerated research on stock structure and abundance. The FY 1991 budget request provides $750,000 for this requirement. While significant progress is expected from assessments of resource abundance in the first year, the real benefits of determining stock structure of the pollock resource will not be realized for several years. Further, these initiatives will do little to enhance data collection from the fisheries operating in and around the Donut Hole. Cooperation with user nations and the USSR is essential for data collection and the early resolution of these problems.

QUESTION:

What do you anticipate for future fishery science needs in the region?

ANSWER:

Driftnet:

The evaluation of the impacts of North pacific driftnet fisheries on marine resources of interest to the U.S. beyond salmonids will require major research activities in 1990-1992 if the U.S. is to argue effectively for moratoria as suggested in the U.N. Resolution on Driftnets. The information on driftnet by-catch rates from observer programs must be coupled with information on the population status and dynamics of affected species to evaluate the seriousness of the take. The current North Pacific driftnet research program lacks the necessary population assessment component.

Bering Sea Donut Hole:

While significant progress has been made on stock assessment methods, scientists have only begun to scratch

The fish produced at Mitchell Act hatcheries contributes to the Northwest fisheries from Alaska to California, including British Columbia.

Estimate of Value of Columbia River Fishery Development Programs Hatchery Releases in FY 1988.

Stock	Release	Yield to Adult	Percent Caught	Value Per Fish Caught	Total Value
Upriver Brights	17,015,600	0.5%	91.3%	37.68	$2,926,840
Tule Chinook	63,716,800	0.5%	85.7%	48.36	13,203,561
Sping Chinook	6,694,900	1.0%	78.7%	47.42	2,498,506
Coho	18,844,100	5.0%	87.5%	36.41	30,017,474
Steelhead	2,619,100	6.2%	48.4%	98.34	7,728,929
Cutthroat	174,400	5.0%	33.3%	120.00	348,451
Total	109,064,900				$56,723,761

the surface on understanding recruitment processes and interrelationships that exist between components of the marine ecosystem.

Recruitment is an important consideration in the management of marine resources. Predation and feeding conditions are biological factors that affect recruitment. Ocean transport and upwelling conditions are examples of nonbiological conditions considered to be of importance. Current understanding of how biological and nonbiological processes affect recruitment can best be described as rudimentary.

The state of knowledge on interrelationships between components of the marine ecosystem can be characterized as embryonic. Need exists for better data on food habits of fish, marine mammals and birds, including species composition of the diet and size ranges of prey that are consumed. Currently, little is known about how fish, marine mammal, and seabird populations respond to changes, whether due to fishery removals, oceanographic conditions, or the prey field available to them.

QUESTION:

What further enforcement measures would you recommend?

ANSWER:

Driftnet:

Enforcement efforts to-date have been very effective, and are expected to improve if the enforcement measures contained in the recently negotiated agreements with Japan, Korea, and Taiwan are effectively implemented. Unfortunately, this is not an overnight process. Unless there is effective flag state fisheries enforcement in the North Pacific, the U.S. must continue to provide the necessary enforcement presence to deter those who illegally harvest salmon resources in the North Pacific.

Bering Sea Donut Hole:

Foreign fishing vessels in the Donut Hole use the area as a staging ground for forays into the U.S. EEZ. There is adequate evidence of this. The long term solution is international management, but until that becomes a reality, a continuing enforcement presence is needed in the Donut Hole.

MARINE MAMMAL OBSERVERS

QUESTION:

How much coverage of fishing activity was provided by the $7.5 million appropriated last year?

ANSWER:

Of the $7.5 million, $1.1 million will augment the Eastern Tropical Tuna/Porpoise Observer Program to provide 100 percent coverage on domestic vessels as required by law, and $6.1 million will fund the Exemption Permit Observer Program for Category I fisheries.

OUTSTANDING GRANT AWARDS

The State of Washington has applied for Department of Commerce grants to assist the implementation and administration of a number of critical ongoing fisheries programs and projects (Mitchell Act, Pacific Salmon Treaty, etc.) The state has used, and is currently using, its funds to keep the programs operating until the pre-award costs are reimbursed. They have now been advised that the Department may no longer be supporting pre-award grant costs.

QUESTION:

Would you please detail this situation?

ANSWER:

The agency has informed the grantee community that preaward costs will not be supported as a matter of routine business. A practice had existed whereby grantees routinely incurred project-related expenses prior to the receipt of the NOAA award and fully expected NOAA to support these preaward costs. The agency is attempting to eliminate this practice which does not allow for proper Federal management or oversight. The agency realizes that through extenuating circumstances there are instances when preaward costs will be acceptable.

QUESTION:

Is it equitable or appropriate for the Department to change its preaward policies in the middle of the annual grant cycle without advising the states in advance?

ANSWER:

Yes. Mismanagement of Federal funds or conditions that reflect an abuse of stewardship of Federal funds are not acceptable even if such actions been have taken in the past. The agency is committed to correcting the deficiencies.

FRIDAY, MARCH 2, 1990.

TECHNOLOGY ADMINISTRATION

WITNESSES

LEE W. MERCER, DEPUTY UNDER SECRETARY FOR TECHNOLOGY

DEBORAH WINCE-SMITH, ASSISTANT SECRETARY FOR TECHNOLOGY POLICY

JOSEPH F. CAPONIO, DIRECTOR, NATIONAL TECHNICAL INFORMATION SERVICE

Dr. JOHN W. LYONS, DIRECTOR, NIST

Mr. SMITH. Next we have the Office of Technology Administration. The request is $4,583,000.

We will insert the budget justifications in support of this request at this point in the record.

[The justifications follow:]

U. S. DEPARTMENT OF COMMERCE

TECHNOLOGY ADMINISTRATION

FISCAL YEAR 1991

CONGRESSIONAL BUDGET JUSTIFICATION

Department of Commerce
Technology Administration

BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION

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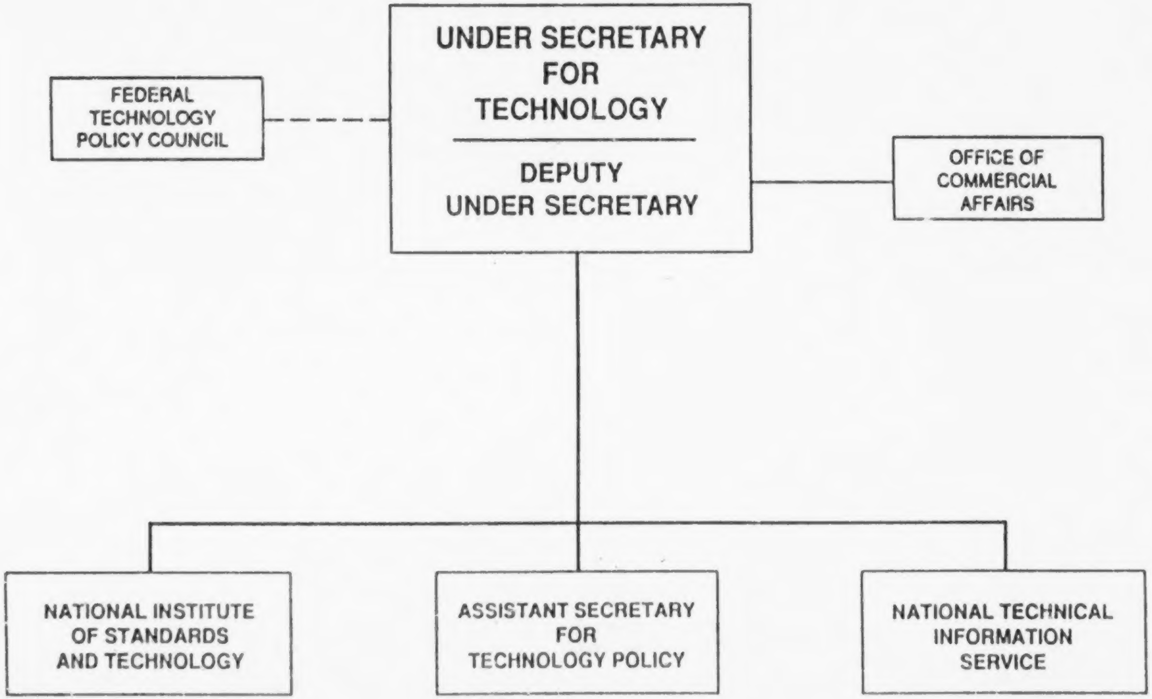
U.S. DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION



UNDER SECRETARY
FOR
TECHNOLOGY

DEPUTY
UNDER SECRETARY

FEDERAL
TECHNOLOGY
POLICY COUNCIL

OFFICE OF
COMMERCIAL
AFFAIRS

NATIONAL INSTITUTE
OF STANDARDS
AND TECHNOLOGY

ASSISTANT SECRETARY
FOR
TECHNOLOGY POLICY

NATIONAL TECHNICAL
INFORMATION
SERVICE

General Statement

Since World War II, America has set the world pace in new scientific discoveries and innovations. These advances have fueled our nation's economic prosperity, guaranteed our national security, and vastly improved the quality of life throughout the world. During the last decade, the United States has faced intense international competition, and has experienced an erosion in its domestic and export position in traditional industries as well as in those sectors most technologically advanced.

Recognizing the importance of technology to the nation's long-term competitiveness and strength in the global marketplace, the Technology Administration was established by Public Law 100-519. Based on a core of existing technology-related agencies, this new organization provides the Department of Commerce--the Federal agency charged with providing services to business and industry--with the authority for a broad and coordinated range of programs to help improve U.S. competitiveness.

The Technology Administration provides a central point within the Department for enhancing the role and contribution of technology to U.S. competitiveness and economic security. The Administration works closely with business, government agencies at the Federal, state and local levels, and other organizations. It manages a variety of Commerce technology policy, research and development, and information functions, acting as the Department's focus for commercial technology matters. The Administration plays a key supporting role to the Secretary, the Economic Policy Council, and the White House Office of Science and Technology Policy in making policy decisions affecting the nation's technological competitiveness. The Administration provides industry with a wide range of services to enhance U.S. competitiveness by improving industry's ability to commercialize new technologies and to increase the productivity and quality of American products and services.

The total FY 1991 appropriation budget request for the Technology Administration, including the National Institute of Standards and Technology (NIST), is $202,991,000, an increase of $29,502,000 over the adjusted base. A separate budget document has been submitted for NIST. A summary of the budget requested for the Technology Administration is:

Executive Direction

Responsibilities of this activity include directing the activities of the immediate office of the Under Secretary and providing the leadership and policy guidance to the organizational units reporting to the Under Secretary. $1,229,000, an increase of $150,000 over the adjusted base of $1,079,000 is requested to provide for legal counsel necessary to manage the operations of the Technology Administration.

Technology Policy and Commercial Technology Application

The goal of this activity is to perform the necessary analytical and assessment functions and plan and help implement actions which stimulate U.S. private sector productivity, international competitiveness, and growth, and enhance economic security. Programs carried out under this heading have been designed to stimulate private sector cooperative research and development (R&D); facilitate the commercialization of innovations; support private sector productivity improvement efforts; foster better quality in U.S. manufacturing; and contribute to achieving U.S. trade objectives.

Responsibilities of this activity include: (1) encouraging the formation of Industrial Technology Partnerships designed to achieve major advances in technology and innovation; (2) identifying and recommending changes designed to remove Governmental barriers to productivity improvement and providing for productivity growth and international competitiveness in commercial technology; and (3) coordinating the formulation and implementation of policies for strategic resources, and technology transfer and privatization of unclassified federally funded R&D, Federal patent policy, and metric conversion.

$3,354,000. The FY 1991 adjusted base of $3,354,000 will enable the Assistant Secretary for Technology Policy to conduct the technology policy planning and program functions envisioned in the Technology Administration's enabling legislation, including programs to: conduct broad policy analyses of barriers and incentives to U.S. technology commercialization; assess and track basic and emerging technologies; exercise international technology policy responsibilities; U.S. standards policies, and Federal technology management.

The National Institute of Standards and Technology

$198,408,000, an increase of $29,352,000 over the adjusted base. This request includes substantial increases for core research programs such as light wave technology, robotics, and advanced semiconductor measurement issues. These research programs form the technical basis for NIST's development of measurements and standards upon which the U.S. industries depend. The Manufacturing Technology Centers and an Advanced Technology Program will be funded at a total of $15,000,000.

National Technical Information Service

NTIS is the central source for the acquisition and public sale of domestic and foreign government-funded research, development, and engineering reports and associated business information. The program directly promotes the development and application of science and technology, and provides channels for the dissemination of specialized information to business, industry, Government, and the public. Approximately 68,000 new technical information products are processed annually and made available. The Information Clearinghouse program funds its operating expenses through the sale of its products and services -- not through direct appropriations, therefore, no appropriated funds are requested for NTIS. NTIS plans to use up to $500,000 to fund modernization efforts in FY 1991. A review of NTIS accomplishments is included in this document.

Overview of Appropriations

In FY 1989, the Technology Administration was funded through the Economic and Statistical Analysis' (ESA) salaries and expenses and a transfer from General Administration's salaries and expenses accounts, where a number of the functions that were assumed by the new Administration resided. In FY 1990 the programs and operations of the Under Secretary for Technology and the Assistant Secretary for Technology Policy began its independent funding through a separate salaries and expenses account. Other program units in the Administration, funded through separate accounts are the National Institute of Standards and Technology (NIST) and the National Technical Information Service (NTIS). The Information Clearinghouse program, the base program of NTIS, funds its operating expenses through the sale of its products and services--not through direct appropriations.

The Salaries and Expenses appropriation provides funds to support the mission of the Technology Administration. The 1991 estimate included in this request is provided below:

	1990 Appropriation Currently Available		1991 Estimate		Increase or (Decrease)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Salaries and Expenses..........	59	$3,875	59	$4,583	0	$708	35

Department of Commerce
Technology Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.	Summary of adjustments to base:		Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990	Pos./BA.			59	$3,900
		FTE/Obl.			46	3,900
	Sequester applied, 1990	Pos./BA.			0	(25)
	Appropriation currently available, 1990	Pos./BA.			59	3,875
		FTE/Obl.			46	3,875
	FY 1991 adjustments to base:					
TA-11	Adjustment for 1990 pay raise and related costs.	Pos./BA.	0	$99		
	Other cost changes	Pos./BA.		459		
	Subtotal, adjustments to base and built-in changes				0	558
	1991 Base	Pos./BA.			59	4,433
		FTE/Obl.			45	4,433

Page No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Technology Policy:											
TA-19	Executive Direction	Pos./BA.	0	0	26	$808	16	$1,079	16	$1,229	0	$150
		FTE/obl.	0	0	14	808	14	1,079	14	1,229	0	150
TA-23	Technology Policy and Commercial Technology Application	Pos./BA.	0	0	33	3,067	43	3,354	43	3,354	0	0
		FTE/Obl.	0	0	32	3,067	31	3,354	31	3,354	0	0
	Total, Technology Policy	Pos./BA.	0	0	59	3,875	59	4,433	59	4,583	0	150
		FTE/Obl.	0	0	46	3,875	45	4,433	45	4,583	0	150

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
Technology Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase (Decrease) over 1991 Base
Total Obligations	0	$3,875	$4,433	$4,583	$150
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Trust funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	0	0	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	0	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	0	3,875	4,433	4,583	150
Transferred to/from other accounts	0	0	0	0	0
Sequester	0	25	0	0	0
Appropriation	0	3,900	4,433	4,583	150

Department of Commerce
Technology Administration
Salaries and Expenses

ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Obligations in thousands)

	Perm. Pos.	FTE	Amount
ADJUSTMENTS:			
Transfer 10 positions and $400,000 from Executive Direction to Technology Policy and Commercial Technology Application	0	0	0
Annualization of 1990 program increases Full year cost of positions funded in 1990	0	0	$317
Adjustment for 1990 pay increase and related costs	0	0	99
Adjustment for 1991 pay increase and related costs	0	0	40
Adjustment for 1991 SES pay increase and related costs	0	0	20
Cost Changes:			
Extra Compensable day			10
Civil service retirement system			-6
Federal employee retirement system			11
Thrift savings plan			1
Federal insurance contributions act (OASDI) (FERS-related)			6
Medicare			1
Health insurance premium			12
Employees' compensation fund			1
Rental payments to GSA			17
Communications, utilities and miscellaneous charges			-4
Printing and reproduction			2
Other services			20
Supplies and materials			2
Equipment			9
Total			558

Department of Commerce
Technology Administration
Salaries and Expenses

JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollars in thousands)

			FTE	Amount
Adjustments:				
Transfer 10 positions and $400,000 from Executive Direction to Technology Policy and Commercial Technology Application			0	0
11. Personnel Compensation				
Full year cost in 1991 of positions funded for past year 1990:				
Annual salary of new positions in 1990	...	$985		
Less 5% lapse	...	49		
Full year cost of personnel compensation			...	$936
Total personnel benefits				223
Full year cost of pers. comp. & benefits				1,159
Compensation and benefits in 1990 appropriation				842
1991 Adjustment to Base			...	+317

Adjustment for 1990 pay increase and related costs: (+$99,000) - The 1990 pay increase was computed as follows:

Total cost in 1990 of pay increase	0	76	
Less amount absorbed	0	76	
Anticipated FY 1990 pay increase supplemental	0	0	
Amount in FY 1991 to provide full-year cost of pay increase	0	99	
Less amount absorbed in FY 1991	0	0	
1991 Adjustment to base for 1990 pay raise			+99

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In FY 1990, TA is absorbing the full cost of this pay increase.

Adjustment for 1991 pay increase and related costs: (+$60,000) - The 1991 pay increase was computed as follows:

Total cost in 1991 of general pay increase	80		
Less amount absorbed	40		
Subtotal, adjustment for 1991 general pay increase		40	
Total cost in 1991 of SES pay increase	40		
Less amount absorbed	20		
Subtotal, adjustment for 1991 SES increase		20	
Total adjustment for 1991 pay increase			+60

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

One more compensable day	+10

The cost of one extra compensable day in fiscal year 1991 was calculated by dividing the fiscal year 1990 estimate for personnel compensation and benefits by 260 compensable days for an additional cost of $10,435.

Civil Service Retirement System (CSRS)	-6

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employee's Retirement System. We estimate the percentage of payroll of employees who are covered by retirement systems will drop from 74.4 percent for CSRS in fiscal year 1990 to 70.8 percent in fiscal year 1991. This will result in a decrease of $6,000 in the cost of CSRS contributions. The calculations for decreased costs for CSRS contributions are:

Payroll subject to retirement ($2,267,000)	
Cost of CSRS contributions in FY 1991 ($2,267,000 x .708 x .07)	112
Cost of CSRS contributions in FY 1990 ($2,267,000 x .744 x .07)	118
Decrease in cost of CSRS contributions	-6

Federal Employees' Retirement System (FERS)	+11

The number of employyes covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS> We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 25.60 percent in fiscal year 1990 to 29.20 percent in fiscal year 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 to 13.00 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement ($2,267,000)	
Basic benefit cost in FY 1991 ($2,267,000 x 29.20 x .1300)	86
Basic benefit cost in FY 1990 ($2,267,000 x 25.60 x .1297)	75
Increase in basic benefit contributions (1991-1990)	11

Thrift Savings Plan .... +1

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of eligible employees covered by the Thrift Savings Plan will rise from 25.60 percent to 29.20 percent. We estimate the agency contributions for the Thrift Savings Plan will average 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Thrift plan cost in FY 1991 ($2,267,000 x 29.20 x .1300)	13
Thrift plan cost in FY 1990 ($2,267,000 x 25.60 x .1297)	11
Total Thrift Savings Plan Increase	2

Federal Insurance Contributions Act (OASDI) (FERS-related) .... +6

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will rise to $52,725 in fiscal year 1991 from $50,025 in fiscal year 1990, and the OASDI tax rate will increase from 6.17 percent in fiscal year 1990 to 6.20 percent in fiscal year 1991. This will result in an increase of $6,000 as follows:

OASDI			
FERS payroll subject to FICA tax in 1991 ($2,267,000 x .2920 x .843)	$558		
FERS OASDI tax in 1991 ($558,036 x .0620)		36	
FERS payroll subject to FICA tax in 1990 (2,267,000 x .2560 x .816)	474		
FERS OASDI tax in 1990 ($473,567 x .0617)		29	
Total OASDI Increase (1991-1990)			6

Medicare .... +1

All employees are subject to medicare contributions. The rate will remain at 1.45 percent, but the percentage of payroll subject to FICA will increase as follows:

Total payroll	2,267
Total payroll subject to FICA in 1991 ($2,267,000 x .843)	1,911
Total payroll subject to FICA in 1990 ($2,267,000 x .816)	1,850
Increase in Medicare tax ($61,209 x .0145)	1

Health Insurance Premium .... +12

The Technology Administration contribution to the Federal Health Benefit Program increase by $12,000 as a result of the changes by the insurers effective January 1, 1989. The increase was computed based on employee participation in the various health benefit plans and the associated increases.

Employees' Compensation Fund .... +1

The Employees' Compensation Funds bill for the Technology Administration for the year ending June 30, 1989 is $1,000 higher than the bill for year ending June 30, 1988. The charges will be reimbursed to the Department of Labor pursuant to Public Law 86-767, as amended.

Rental payments to GSA .... +17

GSA rent costs have increased an average of 4.4%. Applied to the 1990 base estimate of $425,000, TA is requesting an adjustment of $17,000.

FTS 2000 .... -4

Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone service.

Printing .... +2

The cost of printing and binding, including labor, paper, and commercial procurement prices, is projected to rise $2,000. The increase was calculated by applying an adjustment of 7 percent in accordance with GPO Circular Letter No. 307 dated April 28, 1989.

Other Services .... +20

The $20,000 increase was calculated by applying the GNP deflators of 4% to the base of $507,000, which includes a working capital increase of $5,000. This is due primarily to increases in salary costs for services performed, and increases in costs of equipment maintenance.

Supplies and materials .... +2

The increase was calculated by applying the GNP deflator of 4% to the base of $42,000. This covers basic costs for supplies and materials needed to effectively support the office.

Equipment .... +9

The Technology Administration's furniture and equipment is outdated and in need of modernization. The $9,000 increase will be used to replace obsolete furniture and equipment

DEPARTMENT OF COMMERCE
TECHNOLOGY ADMINISTRATION

Appropriation Account: Salaries and Expenses

Appropriation Language and Code Citations

1. For necessary expenses, as authorized by law, of the Technology Administration.
   PL 100-519;
   15.U.S.C. 1516;
   15 U.S.C. 3701 *et seq*., (Chapter 63);
   15 U.S.C. 3704d;
   15 U.S.C. 1604;
   40 U.S.C. 759f;

PL 100-519, The "National Institute of Standards and Technology Authorization Act for Fiscal Year 1989" establishes the Under Secretary for Technology.

15 U.S.C. 1516 provides the Department of Commerce with the authority to gather and distribute certain statistical information.

15 U.S.C. 3701 *et seq*., (Chapter 63) provides the Department of Commerce with the authority relating to studies of technological development in the United States, cooperative technology arrangements, and the transfer of industrial technology from the Federal Government to the private sector.

15 U.S.C. 3704(d) (The Japanese Technical Literature Act) provides that the Secretary of Commerce shall establish and, through the National Technical Information Service and other Department of Commerce offices, maintain a program to: monitor Japanese technical activities and developments; consult with businesses, libraries, etc. regarding their needs for Japanese technology and engineering information; acquire and translate selected Japanese technical reports and documents of value to Federal Government and U.S. businesses and researchers; and coordinate with other Federal agencies to identify significant gaps and avoid duplication in efforts to acquire, translate, index, and disseminate Japanese technical information.

30 U.S.C. 1604 provides the Department of Commerce with the authority relating to the preparation of reports on user needs for critical materials.

40 U.S.C. 759(f) provides the authority to (1) exercise the functions of the Secretary of Commerce under provisions in Federal Information Processing Standards authorizing the Secretary to waive compliance with requirements of the standards; (2) issue interpretive guidelines concerning the waiver provisions of the standards; and (3) join with the Director, National Institute of Standards and Technology, in recommending to the Secretary the establishment of uniform Federal automatic data processing standards.

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Technology Policy
Subactivity: Executive Direction

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive direction	Pos./BA..	0	0	26	$808	16	$1,079	16	$1,229	0	$150
	FTE/Obl..	0	0	14	808	14	1,079	14	1,229	0	150
Total requirements	Pos./BA..	0	0	26	808	16	1,079	16	1,229	0	150
	FTE/Obl..	0	0	14	808	14	1,079	14	1,229	0	150

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
Technology Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
EXECUTIVE DIRECTION

Goals and Objectives for FY 1991

Goals:

To reorganize Commerce's science and technology programs to provide a strong, centered focus for coordination of Commerce's important science and technology activities in order to improve the competitive standing of U.S. industry with regard to technological capabilities.

Objectives:

- Develop and administer programs directed at maximizing the effectiveness of private sector investment in commercial applications of new process and product technology.
- Implement new programs directed at technology commercialization, a requirement of the Omnibus Trade and Competitiveness Act of 1988.

Base Program FY 1991

The Technology Administration was established in accordance with Public Law 100-519 in recognition of the critical importance of technology to the nation's long term competitiveness and strength in the global market place. A key aim is to support industry in its effort to create better and more competitive commercial products, services and markets. It will integrate and coordinate several Commerce technology functions to that end. The Under Secretary for Technology, under the provisions of P.L. 100-519, has the responsibility to oversee and direct the following policies and activities of the science and technology programs:

1. manage the Technology Administration and supervise its agencies, programs, and activities;

2. conduct technology policy analyses to improve United States industrial productivity, technology and innovation, and cooperate with United States industry in the improvement of its productivity, technology, and ability to compete successfully in world markets;

3. carry out any functions formerly assigned to the Office of Productivity, Technology and Innovation; and

4. assist in the implementation of the Metric Conversion Act of 1975.

Department of Commerce
Technology Administration
Salaries and Expenses
CHANGES FOR FY 1991
(Direct obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction	Pos./BA	16	$1,079	16	$1,229	0	$150
	FTE/Obl.	14	1,079	14	1,229	0	150

An increase of $150,000 is requested to reimburse the Department's Office of General Counsel for legal services provided to the Technology Administration. Specifically, the funds will provide for a Chief Counsel to the Under Secretary for Technology and supporting staff.

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Technology Policy
Subactivity: Executive Direction
Program Change: Executive Direction

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11	Personnel compensation	0	0
11.1	Full-time permanent	0	0
11.3	Other than full-time permanent	0	0
11.5	Other personnel compensation	0	0
11.8	Special personnel services payments	0	0
11.9	Total personnel compensation	0	0
12.1	Civilian personnel benefits	0	0
13	Benefits for former personnel	0	0
21	Travel and transportation of persons	0	0
22	Transportation of things	0	0
23.1	Rental payments to GSA	0	0
23.2	Rental payments to others	0	0
23.3	Communications, utilities, and miscellaneous charges	0	0
24	Printing and reproduction	0	0
25	Other services	$150	$150
26	Supplies and materials	0	0
31	Equipment	0	0
99	Direct obligations	150	150

Department of Commerce
Technology Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Technology Policy
Subactivity: Technology Policy and Commercial Technology Applications

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Technology policy and commercial technology application	Pos./BA..	0	0	33	$3,067	43	$3,354	43	$3,354	0	0
	FTE/Obl..	0	0	32	3,067	31	3,354	31	3,354	0	0
Total requirements	Pos./BA..	0	0	33	$3,067	43	3,354	43	3,354	0	0
	FTE/Obl..	0	0	32	3,067	31	3,354	31	3,354	0	0

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
Technology Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
TECHNOLOGY POLICY AND COMMERCIAL TECHNOLOGY APPLICATION

Goals and Objectives

Goal:

Maximize the role and contribution of technology to U.S. competitiveness and economic security by serving as a central focal point for commercial technology policies and programs within the Department and Executive Branch.

Objectives:

Within the Department of Commerce and Executive Branch

- Develop and advocate policy recommendations for improving U. S. technological competitiveness and economic security by removing regulatory, procurement and other barriers to the commercialization of science and technology advances.
- Play a key support role to the Department of Commerce, Economic Policy Council, and White House Office of Science and Technology Policy in making policy decisions affecting the nation's technological competitiveness.
- Serve as the Department's focal point for international science and technology policy issues, government-to-government negotiations, and activities to ensure U. S. commerce's competitive interests are best served.
- Assure that the private sector has the maximum opportunity to commercialize technologies developed with Federal funds, and improve the delivery of the government's technology-related services.
- Act as the Commerce Department's technology liaison with other R&D agencies, including the Department of Defense.

Working with the Private Sector

- Serve as industry's focal point for dealing with the Executive Branch on commercial technology-related policy issues and initiatives.
- Play a catalytic role to encourage expanded cooperation within the private sector, and between government and the private sector, in order to make better use of the country's technological resources to improve U. S. competitiveness.

- Encourage adoption by U. S. companies of technologies and methodologies to improve their international competitiveness, for example advanced manufacturing technologies and related modern management practices.

- Assist state and local governments in their own initiatives to strengthen U. S. technology-based companies and institutions by providing policy-related information and support.

- Conduct special programs that provide information, services, and recognition to U. S. technology-based industry.

Base Program

The former Office of Productivity, Technology, Innovation (OPTI) was abolished in October 1988 (P.L. 100-519) and its functions absorbed into the Office of the Assistant Secretary for Technology Policy in the new Technology Administration.

The new office is expected by statute and current top Department officials to have a broader scope and function. This enhanced scope is supported by the Department's recognition that the major issues facing the agency and several major goals of the Department, have a strong technology-related component.

The organizational structure of the Assistant Secretary for Technology Policy has been structured with four components as outlined below:

1. Office of Technology Policy. This key unit will develop, coordinate, and advocate policies and strategies to promote U.S. competitiveness through technology development and commercialization; it will have policy study and policy implementation functions.

2. Office of International Programs. This office will develop and coordinate the Department's policies in international science and technology to ensure that international technology policies and programs support U.S. commercial and competitive interests. (This office will begin as a staff function to the Assistant Secretary).

3. Office of Technology Assessment and Project Development. This office will promote U.S. technology development and commercialization by performing policy-related technology assessments and supporting special projects in such areas as visual digital systems, semiconductors, superconductivity, and other emerging and basic technologies.

4. Office of Technology Commercialization. This office will provide the principal outreach to and interface with the private sector and government agencies on technology development and commercialization programs.

Demands for these new functions have been heavy as the operation was being organized. The new Office of the Assistant Secretary has received important new assignments, such as the leadership role in the Economic Policy Council Working Group on Research, Development, Technology and Innovation, supporting the technology component of the visual digital systems policy review, and the Trade Act-mandated report on four critical technologies. In order to perform these priority assignments, existing staff has been reassigned and staff resources have been borrowed from other agencies on a temporary basis. Consequently, the base program staff is spread over a much wider functional area.

The base program includes the following responsibilities:

- carrying out tasks assigned by law or Executive Order relating to:
    - conducting policy analyses, including a Trade Act report on four critical technologies;
    - commercializing Federally-funded technology;
    - reviewing international S & T agreements;
    - providing information on Japanese technical activities, developments, and literature;
    - administering the President's National Medal of Technology;
    - supporting metric conversion;
    - providing reports on critical materials;
    - collecting and disseminating information on initiatives by State and local governments related to promotion of technological innovation;
    - cooperating with U.S. industry to commercialize technology and improve its productivity, quality, and ability to enlarge markets successfully in the world; and
    - participating in U.S. government and private sector technology committees and commissions.
- recommending removal of Government barriers to and incentives for technology-based growth and international competitiveness;
- promoting cooperation among and between Federal, State and local government agencies, private firms, and academia to increase competitiveness through improvod technological innovation;

- working with NIST, Defense, other Federal agencies and industry to promote shared centers for flexible, computer-integrated manufacturing;

- promoting U.S. commercial interests in international S&T matters; and

- providing information on productivity-enhancing methods.

Department of Commerce
Technology Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation	0	0	0
11.1	Full-time permanent	$2,685	$2,685	0
11.3	Other than full-time permanent	12	12	0
11.5	Other personnel compensation	45	45	0
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	2,742	2,742	0
12.1	Civilian personnel benefits	384	384	0
13	Benefits for former personnel	0	0	0
21	Travel and transportation of persons	177	177	0
22	Transportation of things	0	0	0
23.1	Rental payments to GSA	442	442	0
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities, and miscellaneous charges	43	43	0
24	Printing and reproduction	59	59	0
25	Other services	539	689	$150
26	Supplies and materials	42	42	0
31	Equipment	5	5	0
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total, direct obligations	4,433	4,583	150
	Reimbursable obligations	0	0	0
	Total obligations	4,433	4,583	150

	1990 Base	1990 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time Equivalent Employment:			
Full-time permanent	45	45	0
Other than full-time permanent	0	0	0
Total	45	45	0
Authorized Positions:			
Full-time permanent	59	59	0
Other than full-time permanent	0	0	0
Total	59	59	0

Department of Commerce
Technology Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11.1 Full-time permanent			
Executive level	$186	$186	0
Senior executive service	412	412	0
General schedule	2,087	2,087	0
Commissioned officers	0	0	0
Wage board/marine	0	0	0
Scientific & professional (P.L. 80-313)	0	0	0
Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
Examiners of trademark appeals (P.L. 98-677)	0	0	0
Senior foreign service	0	0	0
Foreign service staff	0	0	0
Foreign service nationals	0	0	0
Consultants and reports	0	0	0
Students	0	0	0
Subtotal, permanent positions	2,685	2,685	0
11.3 Other than ful. time permanent			
General schedule	12	12	0
Wage board	0	0	0
Expert and consultant	0	0	0
Student	0	0	0
Subtotal, other than full-time permanent	12	12	0

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11.5 Other personnel compensation			
Overtime	4	4	0
SES performance awards	10	10	0
Cash awards	6	6	0
Merit pay awards	25	25	0
Other	0	0	0
Subtotal, other personnel compensation	45	45	0
11.8 Special personnel services payment			
Foreign service officers (State)	0	0	0
Other	0	0	0
Subtotal, special personnel services payment	0	0	0
11.9 Total personnel compensation	2,742	2,742	0
12.1 Personnel benefits			
Civil service retirement	77	77	0
Federal Employees' Retirement System (FERS)	131	131	0
Thrift savings plan	19	19	0
Federal Insurance Contribution Act (FICA)	93	93	0
Health insurance	50	50	0
Life insurance	11	11	0
Employees' Compensation Fund	1	1	0
Other	2	2	0
Subtotal, personnel benefits	384	384	0
13 Benefits for former personnel			
Severance pay	0	0	0
Unemployment compensation	0	0	0
Subtotal, benefits for former personnel	0	0	0

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
21 Travel and transportation of persons			
Common carrier	108	108	0
Mileage	11	11	0
Per diem	58	58	0
Other	0	0	0
Subtotal, travel and transportation of persons	177	177	0
22 Transportation of things			
Subtotal, transportation of things	0	0	0
23.1 Rental payments to GSA			
Total, Rental payments to GSA	442	442	0
23.2 Rental payments to others			
Total, Rental payments to others	0	0	0
23.3 Communications, utilities, and miscellaneous charges			
Rental of automatic data processing equipment	0	0	0
Rental of office copying machines	6	6	0
Other equipment rentals	0	0	0
Federal Telecommunications System (FTS)	33	33	0
Other telephone, telegraph and teletype services	0	0	0
Postal services by USPS	4	4	0
Other	0	0	0
Subtotal, communications, utilities and miscellaneous charges	43	43	0

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
24	Printing and reproduction			
	Publications	19	19	0
	Public use forms	3	3	0
	Envelopes	5	5	0
	Other printing and reproduction	32	32	0
	Subtotal, printing and reproduction	59	59	0
25	Other services			
	Training:			
	University	6	6	0
	Office of personnel management	5	5	0
	Other	0	0	0
	Maintenance of equipment	15	15	0
	GSA reimbursable services	0	0	0
	ADP Services	25	25	0
	Telecommunications services	0	0	0
	Payments to GA, WCF	303	453	150
	Public sector	185	185	0
	Subtotal, other services	539	689	150
26	Supplies and materials			
	Other supplies	36	36	0
	ADP supplies	6	6	0
	Other	0	0	0
	Subtotal, supplies and materials	42	42	0
31	Equipment			
	Office machines and other equipment	0	0	0
	ADP equipment	4	4	0
	ADP software	1	1	0
	Other	0	0	0
	Subtotal, equipment	5	5	0
32	Lands and Structures	0	0	0

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
33 Investments and loans	0	0	0
41 Grants, subsidies and contributions	0	0	0
42 Insurance claims and indemnities	0	0	0
43 Interest and dividends	0	0	0
44 Refunds	0	0	0
99 Subtotal, direct obligations	4,433	4,583	150
Reimbursable obligations	0	0	0
Total budget authority	4,433	4,583	150

Department of Commerce
Technology Administration
Salaries and Expenses

CONSOLIDATED SCHEDULE OF AVERAGE GRADE AND SALARY

	1989 Actual	1990 Estimate	1991 Estimate
Average ES salary	0	$79,460	$96,500
Average GS grade	0	11.33	11.33
Average GS salary	0	$36,154	$39,212
Average salary of ungraded positions	0	0	0

Department of Commerce
Technology Administration
Salaries and Expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting Services	0	$71	$25
Management and Professional Services	0	0	0
Special Studies and Analyses	0	0	0
Management and Support Services for Research and Development	0	0	0
Total	0	$71	$25

Department of Commerce
Technology Administration
Salaries and Expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1988 Actual	1988 Actual	1990 Estimate	1991 Estimate
Periodicals	0	0	$5	$5
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	0	0	$5	$5

Mr. **Smith**. We have here to testify today the Acting Under Secretary for Technology, Lee Mercer.

Do you have a statement?

Mr. **Mercer**. I do, Mr. Chairman. With your permission, I would like to read from at least some of it.

Mr. **Smith**. All right.

Mr. **Mercer**. Mr. Chairman, Mr. Rogers, it is a pleasure to be here today to discuss the Commerce Department's budget request for a total of $203 million for the Technology Administration for fiscal year 1991.

Today you will be hearing from Deborah Wince-Smith, our Assistant Secretary for Technology Policy. We also have Joseph Caponio, the Director of our National Technical Information Service (NTIS) and Dr. John Lyons, the Director of the National Institute of Standards and Technology (NIST).

Statement

Mr. Chairman, there is simply no question that the ability of the United States to compete in global markets in the 1990s and beyond will depend in large measure on our technological skills, not just on creating new breakthroughs in the laboratory, but on translating those breakthroughs into new products, processes and services, not just on creating products, processes and services that are "good enough," but those that are truly world class.

There is also no question that technology will affect virtually every facet of our lives—what and how we are taught, what the nation produces and how it produces it, our culture, everything.

Conversely, virtually every decision we make in government, whether related to macroeconomic policy, foreign policy, trade policy, health policy, educational policy, environmental policy or regulatory policy, affects our technological infrastructure in one way or another.

It is little wonder, then, that President Bush noted in his recent State of the Union speech: "In the tough, competitive markets around, America faces—great challenges and great opportunities. And we know that we can succeed in the global economic arena of the 1990s, but to meet that challenge we must make some fundamental changes, some crucial investment in ourselves."

Against this backdrop, the Technology Administration has its work cut out for it. If technology's full potential to contribute to the nation's competitiveness and economic well-being is to be realized, all those involved with it, including the Technology Administration, must be successful. And it is particularly appropriate that Commerce, with its historic role of serving the needs of industry, should take the lead in establishing a partnership with industry.

We are confident that the Technology Administration will make a big difference in bringing this about. During our first year, we have made a good start in forging a new, effective organization. Let me just mention four developments.

First, the various components of the Technology Administration have developed strong working relationships with each other. We are indeed building a cohesive "family" composed of NIST, NTIS and the Assistant Secretary for Technology Policy.

Second, we have found a number of ways in which our programs can interact, complement and leverage each other. For example, Congress and the President both believe that U.S. industry should have equitable access to foreign R and D activities and information.

All components of the Technology Administration are contributing to that policy goal through the coordinated implementation of activities such as the Japanese Technical Literature Program, Office of Technology Policy outreach programs to encourage industry to take advantage of research opportunities under U.S.-Japan S and T Agreement, NIST-led study teams to explore research opportunities under that agreement, and NTIS's agreements with Japanese information sources, its ability to offer online access to major Japanese S and T databases, and its participation in Project STRIDE.

Similarly, our state and local clearinghouse program is benefiting from the cooperation between the technology commercialization experts in Ms. Wince-Smith's shop and NIST personnel experienced in industrial outreach activities. We expect to submit a report to Congress in the near future.

Third, we have or are in the process of resolving some management issues that I know the committee is well aware of. The Secretary spoke yesterday, I believe, or the Deputy Secretary, of the process that is ongoing in that area.

We hope to create a management structure that will deal effectively and efficiently with all the new programs that the Congress has given NIST, and to identify problems in any management activity that need to be corrected.

In this regard, we are working closely with the Inspector General, I know the Committee is aware, to improve management systems at NTIS. In fact, we are leveraging our abilities at NIST because we have a NIST team helping us at NTIS, as we speak today.

Fourth, we have the strong, and I emphasize strong, support and interest of the department's highest level, the Deputy Secretary and especially the Secretary. With your permission, I should like to submit for the record Secretary Mosbacher's memorandum of February 14 to departmental officers announcing the central role he expects the new Technology Administration to play in developing, coordinating and advocating departmental policy to enhance technology's contribution to our competitiveness and economic well-being and in working with other parts of the Department to ensure that their programs contribute to this goal.

[A copy of the memorandum follows:]

THE SECRETARY OF COMMERCE
Washington, D.C. 20230

FEB 14 1990

MEMORANDUM FOR Secretarial Officers
Heads of Operating Units

SUBJECT: Science and Technology Coordination

The mission of the Department of Commerce is to promote the economic security of the United States by helping U.S. business become more competitive.

America's trace position and technological supremacy are being challenged, and our competitors are aggressively pursuing their own interests as the world has become a global marketplace. To compete successfully during the coming decades, the United States must offer the best products and services possible at the lowest costs.

As part of the Commerce Department's mission to help U.S. industry become more competitive, I recently signed Department Organization Order 10-18 establishing the office of the Assistant Secretary for Technology Policy within the new Technology Administration. That organization now has primary responsibility for developing, coordinating, and advocating Department policy to increase the role of technology and science in enhancing the competitiveness and economic well-being of the United States. It will advise other components of the Department on how their programs and activities affect the climate for technological advancement in the United States.

The Technology Administration is also my focal point for developing and advocating international science and technology (S&T) policies that promote U.S. international competitiveness. It will review the Department's international S&T programs for consistency with such policies, and coordinate the Department's review of federally supported international S&T negotiations and related activities.

Given the vital importance of helping American industry compete in the global marketplace, I hope that all of you will give our newest operating unit your full support and cooperation.

Robert A. Mosbacher

Mr. **Mercer**. I believe you heard yesterday Secretary Mosbacher speak of a new initiative. That is a Technology Administration initiative with MBDA and through the NIST highly regarded Automated Manufacturing Research Facility to create a minority business advanced manufacturing fellowship program.

This will provide opportunities for minority business manufacturing engineers to participate in some of the programs that are going on at the highly successful NIST facility.

We are working with MBDA to create another program that will actually try to identify private capital sources for creating a minority-owned and operated shared flexible computer integrated manufacturing facility. We are told by many experts that these facilities are the wave of the future for manufacturing.

Demographics tell us that we must work with the minority business development agencies because that is where most of our manufacturing capability will come from in the next 20 years, women and minorities.

Mr. Chairman, yes, we are in a period of intense competition among nations with strong technological capabilities and technological information. However much we may long for the days of unquestioned U.S. technological leadership, the simple fact is we can't turn back the clock. I am not sure we should want to. Winston Churchill said if we quarrel with the past, we risk losing the future. The new competition should create a better environment for sustained global technological and economic growth, something we all wish for. The challenge is to ensure that we can compete in that new environment.

That will have substantial ramifications for policy-makers in general, and the Technology Administration in particular. Old assumptions have to be tested. Japan, for example, has demonstrated what can be achieved technologically without the scientific leadership that we prize so highly and by attention to mastering manufacturing processes.

We have led the world in support for sciences and the creation of scientific literature and in winning noble prizes, yet noble prizes are not enough. Technology has no value unless it is being used.

Technology transfer is what is important—transfer from the laboratory to the market place, transfer from the federal laboratories to the market place. This is of crucial importance. It is a place where I believe the Technology Administration can make a real difference.

Understanding the fundamental process is the key to understanding such basic issues as: When is collaboration likely to occur? Are R and D consortia the wave of the future? What kinds of strategic partnerships are needed? How do we ensure the integration of small firms, arguably our most unique technological resource, into large scale consortia activities? How should we manage intellectual property generated by such consortia? How can we encourage industry to look beyond its own in-house capabilities, that is, overcome the infamous "Not Invented Here Syndrome" and take advantage of technological developments from any sources, including those from abroad. That is what our foreign competitors do so well—take advantage of U.S. scientific and technological breakthroughs.

With NIST's technical expertise, NTIS's skill at providing external research documents for firms to incorporate into their own planning, and the Office of Assistant Secretary for Technology Policy's knowledge of corporate behavior patterns, technology commercialization expertise and its understanding of the implications of foreign technology developments for United States industrial competitiveness, we should be able to gain a better understanding of these issues and devise appropriate policies to guide both short- and long-term plans.

The President's budget provides a total of approximately $203 million for the Technology Administration to pursue its goals and objectives. Of this, $198.4 is for NIST. This represents an increase of $34.6 million over the fiscal year 1990 enacted level.

John Lyons, its Director, can discuss its contents in greater detail. At this time, I would note only that we are very pleased that the fiscal year 1991 budget continues funding for the Advanced Technology Program, and the Manufacturing Technology Centers program, and expands NIST's core research capabilities. It represents a proper balance between NIST's new responsibilities and its important core measurement responsibilities.

The President's budget also requests $4.58 million for the Office of Under Secretary for Technology and Office of Assistant Secretary for Technology Policy. Funding is provided to support the immediate office of the Under Secretary and allows the Assistant Secretary's office to continue its policy support role as we seek answers to some of the issues I discussed a moment ago; to work with the Office of Science and Technology Policy and other key agencies; to participate or provide staff support for the Secretary or other senior officials in such fora as the Economic Policy Council and its Working Group on Research, Development, Technology and Innovation, which Commerce chairs, the Vice President's Competitiveness Council, and the newly reinvigorated Federal Coordinating Committee on Science, Engineering and Technology.

In all of those efforts, clearly very important to the welfare of our nation, the Technology Administration seeks the greatest linkage possible between our various resources. Through coordination and leveraging, we will produce a Technology Administration that delivers a product that is clearly greater than the sum of its constituent parts.

Thank you, Mr. Chairman. I would be happy to answer any questions.

[The statement of Mr. Mercer follows:]

STATEMENT OF LEE W. MERCER
DEPUTY UNDER SECRETARY FOR TECHNOLOGY
UNITED STATES DEPARTMENT OF COMMERCE
BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND
RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
MARCH 2, 1990

Department of Commerce
National Technical Information Service
JUSTIFICATION OF PROGRAM AND PERFORMANCE
Information Clearinghouse Program
(Dollar amounts in thousands)

Activity: National Technical Information Service
Subactivity: Information Clearinghouse Program

Goals and Objectives

Goals: To stimulate private sector research and development, accelerate the pace of innovation and maximize the return on Federal research and development investments by disseminating scientific and technological information to business, industry, Government, and other interested individuals and organizations.

Objectives: To provide products and services designed to increase the flow of technology into the world marketplace. To serve as the primary source for the public sale of Government-sponsored research and engineering reports, research in progress reports, machine-processable data files and computer programs.

Base Program

Information Clearinghouse Program - NTIS operates as a central source for the acquisition and public sale of domestic and foreign Government-funded research, development, and engineering reports and associated business information. The program directly promotes the development and application of science and technology, and provides channels for the dissemination of specialized information to business, industry, Government, and the public. The Information Clearinghouse program funds its operating expenses through the sale of its products and services--not through direct appropriations. Approximately 65,000 new technical information products are processed annually and made available. Through the acquisition and distribution of Government-produced computer programs and computerized databases, access has been provided to bibliographic databases produced by or for Government agencies. Access to summaries describing ongoing Government-funded research projects in the fields of physical sciences, engineering, and life sciences also are available. Through the collection and licensing of Federally-funded patents, licensees pledge millions of dollars to private investment in R&D and new plant construction to create new processes and products, businesses, and jobs. Government-to-Government agreements for the exchange of scientific and technical information are established, and foreign information is identified, acquired, translated, and disseminated to U.S. industry upon request.

The National Technical Information Act of 1988 (P.L. 100-519) authorized NTIS to utilize net revenues in implementing modernization plans of the service. In FY 1991, NTIS plans to use up to $500,000 to fund modernization efforts.

In FY 1991, NTIS plans to implement an optical disk order processing system. Currently, NTIS Order Processing System (OPS) begins in the Order Control Processing Branch. This branch receives and reviews all correspondence, telex and fax transmissions, and regular mail requests from customers for NTIS products and services. All orders are edited, coded and prepared for further processing into the NTIS automated OPS. At this stage, the orders are filmed by a rotary camera, which assigns and applies a nine digit camera control number directly to each order filmed. This number is unique to that specific order and is used throughout the NTIS system when referring to a customer's order, both during processing and after shipment. When all orders have been filmed, the microfilm is processed and duplicated with copies sent to the Accounting Branch, Subscription Branch, Identification/Inventory Control Branch and Customer Service Branch. This processing and distribution of the film takes about three-five days.

With the optical disk OPS, orders will be prepared as they currently are, scanned onto the optical disk and a nine-digit control number applied to each order. The order will immediately be available to the rest of the NTIS operation, instead of having to wait the three-five days. This improved system will provide a more cost-effective and expeditious manner of performing the needed processing.

NTIS plans to expand this optical disk system to a pilot program for an electronic document system. A vital part of such a system is the capturing of the full text information. The intent is twofold: first, mass storage of full-text documents on optical disks; and second, the ability to transmit documents electronically.

In order to test this concept, NTIS will select a representative sample of documents input into the system. These documents will be optically scanned to convert them into a digital format suitable for storage on optical disk. Disks will be stored in a "jukebox", which will permit retrieval of reports for reproduction and order fulfillment as they are received. Reproduction of reports will be accomplished via laser printing on paper or microfiche, or reports will be electronically transmitted depending on the customer request. With this system NTIS can provide the customer with an enhanced product with quicker order response and, at the same time, reduce the document storage and order processing costs.

To evaluate the pilot program, consideration will be given to service provided the customer, archivability, product quality, and the cost of storage and output. If the test is successful and a cost/benefit analysis supports it, all newly acquired materials will be added to the program.

Summary of Unit Sales and Performance Data

Information Clearinghouse Program:	1989 Actual	1990 Estimate	1991 Estimate
Information products catalogued and indexed	61,307	68,000	68,000
Subscriptions and newsletters:			
Published searches accomplished	1,806	2,000	2,000
Published searches sold	16,523	17,000	17,000
Specialized subscriptions	6,543	6,400	6,400
Abstract newsletters	5,778	5,700	5,400
Government reports announcements and index (GRA&I)	905	850	800
Technology notes	1,430	1,400	1,400
Copies of documents sold:			
Paperbound demand	373,254	375,000	375,000
Microfiche demand	110,264	105,000	100,000
Selected research in microfiche	1,539,455	1,500,000	1,500,000
Data bases offered	9	10	10
Data files offered	1,500	1,600	1,700
Software programs offered	2,600	2,900	3,000
Data base users	18,000	18,000	18,000
Patent licenses granted	68	55	55
Inventions foreign filed	49	26	26
Government-to-Government quid pro quo agreements	52	57	61
Documents translated	4	4	4

Mr. Chairman and members of the Subcommittee, it is a pleasure to be here today to discuss the Commerce Department's budget request for a total of $203 million for the Technology Administration for Fiscal Year 1991. I am accompanied by Deborah Wince-Smith, our Assistant Secretary for Technology Policy; Joseph Caponio, the Director of our National Technical Information Service; and John Lyons, Director of our National Institute of Standards and Technology.

Mr. Chairman, there is simply no question that the ability of the United States to compete in global markets in the nineties and beyond will depend in large measure on our technological skills - not just on creating new breakthroughs in the laboratory, but on translating those breakthroughs into new products, processes and services; not just on creating products, processes and services that are "good enough," but those that are truly world class.

There is also no question that technology will affect virtually every facet of our lives - what and how we are taught, what the Nation produces and how it produces it, our culture - everything! Conversely, virtually every decision we make in Government, whether related to macroeconomic policy, foreign policy, trade policy, health policy, educational policy, environmental policy, or regulatory policy, affects our technological infrastructure in one way or another.

It is little wonder, then, that President Bush noted in his recent State of the Union Speech: "In the tough, competitive markets around, America faces...great challenges and great opportunities. And we know that we can succeed in the global economic arena of the 90's, but to meet that challenge we must make some fundamental changes, some crucial investment in ourselves."

It is fair to say that the Technology Administration has its work cut out for it. If technology's full potential to contribute to the Nation's competitiveness and economic well-being is to be realized, all those involved with it, including the Technology Administration, must be successful. And it is particularly appropriate that Commerce, with its historic role of serving the needs of industry, should take the lead in establishing a partnership with industry.

We are confident that the Technology Administration will make a big difference in bringing this about. During our first year, we have made a good start in forging a new, effective organization. Let me just mention four developments.

First, the various components of the Technology Administration have developed strong working relationships with each other. We are indeed building a cohesive "family", composed of NIST, NTIS and the Assistant Secretary for Technology Policy.

Second, we have found a number of ways in which our programs can interact, complement and leverage each other. For example, Congress and the President both believe that U.S. industry should have equitable access to foreign R&D activities and information. All components of the Technology Administration are contributing to that policy goal through the coordinated implementation of activities such as the Japanese Technical Literature Program, Office of Technology Policy outreach programs to encourage industry to take advantage of research opportunities under the U.S.-Japan S&T Agreement, NIST-led study teams to explore research opportunities under that Agreement, and NTIS's agreements with Japanese information sources, its ability to offer online access to major Japanese S&T databases, and its participation in Project STRIDE.

Similarly, our State and Local Clearinghouse Program is benefiting from the cooperation between the technology commercialization experts in Ms. Wince-Smith's shop and NIST personnel experienced in industrial outreach activities. We expect to submit a report to Congress in the near future.

Third, we have or are in the process of resolving some management issues that I know the Committee is well aware of. We have spent a good deal of time working out plans to ensure that NIST's new responsibilities are implemented as Congress intended, but in a way that supplements and does not detract from NIST's traditional and very important standards and measurement activities. We are also working to develop a new financial management system to improve NTIS's accounts and the systems that provide data for those accounts.

Fourth, we have been very fortunate to have strong support and interest from the Department's highest levels. With your permission, I should like to submit for the record Secretary Mosbacher's Memorandum of February 14 to Departmental officers announcing the central role he expects the new Technology Administration to play in developing, coordinating and advocating Departmental policy to enhance technology's contribution to our competitiveness and economic well-being; in working with other parts of the Department to ensure that their programs contribute to this goal; and in serving as the Department's focal point for developing and advocating related international S&T policies.

So I think we are well-poised to work with other parts of Commerce, other agencies, the private sector, state and local governments, and colleges and universities to develop the kinds of policies and programs that we will need to ensure the technological competitiveness of the United States.

Mr. Chairman, there is simply no question that we have entered a period of intense competition among nations with strong, technological capabilities and technological infrastructures. However much we may long for the days of unquestioned U.S. technological leadership, the simple fact is that we cannot turn back the clock. However, there is no reason to want to. The new competition should create a better environment for sustained global technological and economic growth. The challenge is to ensure that we can compete in that new environment.

That will have substantial ramifications for policymakers in general and the Technology Administration in particular. Old assumptions have to be tested. Japan, for example, has demonstrated what can be achieved technologically without the scientific leadership that we prize so highly, and by attention to mastering manufacturing processes.

Policymakers in the United States have placed a lot of emphasis, and rightly so, on understanding the conditions that affect the supply of R&D in the United States, including what kind of research is likely to be performed and by whom. We spend more than any other nation contributing to the world's storehouse of knowledge about emerging technologies. But we have far less understanding of the dynamics of how and under what incentives research results are actually used by firms and translated into new products and processes with commercial value. This is particularly true with respect to Federally-funded R&D, which is over half the nation's annual R&D investment.

Contributing to that understanding and facilitating technology transfer - transfer from the laboratory to the marketplace in general, and transfer from the federal government's magnificent infrastructure of national and federal laboratories to the private sector in particular - is one place where the Technology Administration can make a real difference. Understanding that fundamental process is the key to understanding such basic issues as: When is collaboration likely to occur? Are R&D consortia the wave of the future? What kinds of strategic partnerships are needed? How do we ensure the integration of small firms - arguably our most unique technological resource - into large scale consortia activities? How should we manage intellectual property generated by such consortia? How can we encourage industry to look beyond its own in-house capabilities - that is, overcome the infamous "Not Invented Here Syndrome" - and take advantage of technological developments from any sources, including those from abroad. That's what our foreign competitors do so well -- take advantage of U. S. scientific and technological break-throughs.

With NIST's technical expertise, NTIS's skill at providing external research documents for firms to incorporate into their own planning, and the Office of Assistant Secretary for Technology Policy's knowledge of corporate behavior patterns, technology commercialization expertise and its understanding of the implications of foreign technology developments for U.S. industrial competitiveness, we should be able to gain a better understanding of these issues and devise appropriate policies to guide both short and long-term action plans.

Indeed, Mr. Chairman, one of the reasons that I take such a personal interest in the success of the Advanced Technology Program is that it may teach us about the dynamics of collaboration and have far greater implications for our long-term competitiveness than the actual scientific information that is produced.

The President's budget provides a total of approximately $203 million for the Technology Administration to pursue its goals and objectives. Of this, $198.4 is for NIST. This represents an increase of $34.6 million over the FY 1990 enacted level. John Lyons, its director, can discuss its contents in greater detail. At this time, I would note only that we are very pleased that the FY 1991 budget continues funding for the Advanced Technology Program, and the Manufacturing Technology Centers Program, and expands NIST's core research capabilities. It represents a proper balance between NIST's new responsibilities and its important core measurement responsibilities.

The President's budget also requests $4.58 million for the Office of the Under Secretary for Technology and the Office of Assistant Secretary for Technology Policy. Funding is provided to support the immediate office of the Under Secretary and allows the Assistant Secretary's Office to continue its policy support role as we seek answers to some of the issues I discussed a moment ago; to work with the Office of Science and Technology Policy and other key agencies; to participate or provide staff support for the Secretary or other senior officials in such fora as the Economic Policy Council and its Working Group on Research, Development, Technology and Innovation, which Commerce chairs, the Vice President's Competitiveness Council, and the newly reinvigorated Federal Coordinating Committee on Science, Engineering and Technology.

It also allows the Assistant Secretary to maintain its important technology programs, such as federal technology transfer, the State and Local Clearinghouse, the Japanese Technical Literature, and Metrication.

In all of these efforts, clearly important to the welfare of the Nation, the Office of Assistant Secretary for Technology Policy will be spending not only its own resources, but will coordinate and collaborate with NIST and NTIS in such fashion as to produce a whole which is greater than the sum of its individual parts.

Thank you, Mr. Chairman. Mrs. Wince-Smith also has some brief remarks to make at this time. After that, we'll be pleased to answer any questions you may have.

Mr. **Mercer**. At this point, Ms. Wince-Smith has a prepared statement, I know, with regard to her office.

Mr. **Smith**. You can give it if you want to.

Ms. **Wince-Smith**. We will submit it for the record.

Mr. **Smith**. We will include it in the record along with your biographical sketch statement and biography of Ms. Wince-Smith.

[The statement and biography of Ms. Wince-Smith follows:]

STATEMENT OF DEBORAH L. WINCE-SMITH
ASSISTANT SECRETARY FOR TECHNOLOGY POLICY
UNITED STATES DEPARTMENT OF COMMERCE
BEFORE THE SUBCOMMITTEE ON
COMMERCE, JUSTICE, STATE, THE JUDICIARY AND
RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
MARCH 2, 1990

Mr. Chairman, it is a very great pleasure to be here today to discuss the President's budget request of $3.35 million for the Office of Assistant Secretary for Technology Policy. I will keep my remarks brief.

The ability of the United States to generate new knowledge and to create new technologies is beyond question. However, our ability to translate that knowledge into products and processes that are truly world class and can compete in global markets is another matter entirely. Throughout the 1980's, our global market share in high technology products steadily declined while that of Japan doubled. In 1986, we ran our first high-tech trade deficit. Markets that we created and once dominated - color TV's, tape recorders, machine tools, semiconductors and semiconductor manufacturing equipment, DRAM's, to name but a few - seem to have fallen in rapid succession.

Can the United States compete in a world marked by intense global competition among a number of nations - not just Japan - with modern, efficient technology infrastructures? Of course. There are a number of encouraging signs: a recommitment to manufacturing excellence and quality; a growing recognition that we will have to do a better job of educating the work force of tomorrow to develop and work with the technologies of the future; an increasing appreciation of the importance of cooperation and partnership among and between all sectors of the R&D enterprise, examples of which include Engineering Research Centers, Science and Technology

Centers, private sector-led consortia, and new collaborative research and development agreements under the recently-enacted Federal Technology Transfer Act.

But there are also troublesome signs as well. Our lead in information age technologies is being chipped away; Japan is out-investing the U.S. in plant and equipment modernization even though our G.N.P. exceeds theirs by $2 trillion.

For these reasons, we need to stimulate and encourage greater R&D investment by the private sector; continue to encourage attention to quality and the production of truly world class goods and services; encourage adoption of advanced manufacturing technologies, especially by small and medium-sized firms; and ensure that the private sector has an opportunity to participate in setting federal R&D initiatives and priorities.

The law that created the Technology Administration in the Commerce Department gave it two fundamental missions that are related to these goals: to "conduct technology policy analyses to improve United States industrial productivity, technology, and innovation" and to "cooperate with United States industry in the improvement of its productivity, technology and ability to compete successfully in world markets."

That these obligations were entrusted to the Commerce Department is entirely appropriate. Commerce is the one agency whose mission it is to help U.S. business become more competitive as a broad, overriding goal, not as a by-product of, or incident to, a specific national mission, such as national security, public health, the environment, food supply, or space exploration.

That Congress focused on "policy analyses" and "cooperation" is also appropriate. The former reflects - quite rightly, I might add - that we need to have a better understanding of the dynamics of how technology is created, developed and disseminated; the factors that encourage or discourage collaboration among firms or between firms, government, and academia; and the impact of such factors as savings rates, anti-trust, taxation, and the impact of accounting standards on innovation.

The latter reflects - also quite rightly - that Government is going to have to look continuously for innovative ways of working with the private sector, state and local governments, and academia to forge cooperative partnerships aimed at promoting the development and commercialization of technology. If we are to succeed in competing with the strong, vertically integrated giants of other countries - such as the keiretzu of Japan - which have the advantages of interfirm integration and access to cheaper and more patient capital, cooperation will be vital.

The President's budget allows us to explore these policy issues and to manage our key programs. These include:

- o Our federal technology management program, through which we strive to break down the walls that have often separated federal and private sector research cooperation with a view to giving the taxpayers a greater return for their $70+ billion investment in R&D in the form of new products and processes, and, through them, new jobs.

- o our Japanese Technical Literature Program which aims at making the best of Japan's commercially valuable R&D available to U.S. business; our immediate goal is to work closely with industry to determine how that Program can best serve its needs;

- o our initiatives on the State and Local Clearinghouse Program through which the federal, state and local governments can work together as partners to share information and expertise to enhance the contribution that technology can make to competitiveness and economic development; we hope to make the Clearinghouse an effective repository of information on what is being done by various levels of government to promote technology competitiveness; an effective network for the sharing of expertise, experience, and resources; and a source of analysis as to the variety and effectiveness of these various initiatives; and

- our Metrication Program through which we work closely with other agencies to encourage their conversion to the metric system by 1992, as required by law, and also work closely with the private sector to encourage it to make the transition to metric that will be increasingly necessary for competition in metric-dominated global markets; the policy ramifications of metrication, involving such crucial issues as access to and participation in standards setting procedures in foreign markerts, has enormous significance for U.S. industry.

Finally, Mr. Chairman, the President's budget allows us to begin the process of integrating domestic and international technology policymaking. As Secretary Mosbacher's memorandum - which Mr. Mercer offered for the record - indicates, my Office will assume responsibility for integrating domestic and international S&T affairs. What goes on technologically in a Western Europe that is rapidly integrating, and an Eastern Europe that is embracing western concepts and emerging as a strong potential market, and in Japan and the Pacific Rim countries - which have shown themselves to be such effective competitors, has enormous implications for the direction and pace of technological development and commercialization. We will continue to work closely with ITA and the other parts of the Department, as we have all along, to carry out our important responsibilities in this arena.

As part of our international responsibilities, we will serve as the Department's principal focal point for encouraging U.S. industry's participation in foreign government-sponsored S&T programs under the U.S.-Japan S&T Agreement as well as programs under the auspices of the European Economic Community. We will also be responsible for working with the Department of State and other agencies to ensure that our S&T relationships with foreign nations are truly symmetrical and that related agreements are negotiated with a view to the proper protection and allocation of rights to intellectual property resulting from research conducted under them, as required by the Omnibus Trade and Competitiveness Act of 1988 and Executive Order No. 12591.

Thank you, Mr. Chairman. That completes my statement and I look foward to answering any questions you may have.

DEBORAH L. WINCE-SMITH

Deborah L. Wince-Smith is Assistant Secretary of Commerce for Technology Policy. The Assistant Secretary is the principal officer within the Department of Commerce for developing, coordinating, and advocating policies that increase the role of technology in contributing to the Nation's competitiveness and economic well-being.

Mrs. Wince-Smith works closely with other federal agencies, the private sector, state and local governments, and colleges and universities to promote the commercialization of federally funded technology, to develop international science and technology policies and identify foreign research opportunities, and to eliminate legal and structural barriers to the commercialization of technology. Her office also spearheads the federal government's metrication initiative, manages the Japanese Technical Literature Program, administers the National Medal of Technology Program, and operates the Clearinghouse on State and Local technology initiatives.

Before assuming her present duties, Mrs. Wince-Smith served in the White House Office of Science and Technology as Assistant Director for International Affairs and Global Competitiveness where she developed policies and goals for our international science and technology programs and helped develop President Reagan's Superconductivity and Competitiveness Initiatives, as well as his Executive Order "Facilitating Access to Science and Technology." Prior to her White House service, Mrs. Wince-Smith was a Program Manager at the National Science Foundation with responsibility for managing bilateral research activities between U.S. scientists and engineers and their counterparts in Eastern Europe.

Trained as a classical archaeologist, she received her Master's Degree from Cambridge University in 1974 and graduated Magna Cum Laude from Vassar College in 1972 where she was elected to Phi Beta Kappa.

Mrs. Wince-Smith was raised in Akron, Ohio, and is married to Ambassador Michael B. Smith. They reside in McLean, Virginia, and have one son.

Mr. SMITH. All right. Thank you.

This whole area you are talking about, for some reason has been somewhat controversial in the executive branch and in Congress, for that matter, for the last several years. I think there has been a failure to recognize for far too long the fact that, while we don't do all the basic research in the world, we have done a lot of basic research, especially the amount of that has been done in the Defense Department and in space which is then put on the shelf and other people use it.

A lot of that research has spinoffs that would help a great deal of our industries produce consumer goods. In large measure, other countries have picked that basic research and converted it to something people wanted, consumer goods. We haven't done enough of that technology transfer.

It seems to me, after listening to people in this field, that one of the reasons—although we have not done enough technology transfer either—but one of the reasons is there is not a bridge between basic research and technology transfer. If you are not a General Electric or a big company, at least, you cannot close that gap.

Now, I think there has been some change in attitude within NIST—in fact, I am sure there has been. We want to get away from NIST only handling core problems. There is this entirely different area over here. For the last three or four years we put extra money in our bill for things beyond core programs. Now you have a new tool for administering these programs.

ALIGNMENT OF NEW MISSIONS

Do you think the responsibility and authority for these new missions is properly aligned now under the new set-up or does it need some more alignment?

Mr. MERCER. First of all, let me say that we view both the core programs at NIST and the so-called extramural programs. The ATP program and the Manufacturing Technology Centers program as being extremely important. In order to have the extramural programs mean anything, of course, you have to have core research that can feed into them. We don't view it as a competition for resources other than in the sense that we all compete for resources within the Federal Government's total budget ceiling. We think we have to emphasize both. We think it is a major step forward in our budget that we have requested adequate funding for the ATP program and the Manufacturing Technology Centers.

We started with a base of zero, as the Chairman knows. As a statement of principle, we believe we have made the correct statement.

Mr. SMITH. You still have most of the emphasis on the core programs; haven't you?

Mr. MERCER. We have to walk before we can run, I guess, is what I can say.

Your original question, are they in the correct location? Programs, of course, can be run in any number of organizational structures. I think that they can be successful—I think they can be successful in a number of organizational structures. I think they do belong in the Technology Administration.

NIST has a wonderful history of working with industry and knows how to work with industry. Certainly they can be successful out there.

You know, the time approach that we want to evolve makes it for me less important where the structures are in one of two units than how many people are brought together to do what industry calls concurrent engineering to get the program running and running successfully.

I think it is a matter of perception as to whether we are emphasizing core programs versus emphasizing the other. We have come from a base of zero to a $15 million request for the new programs. That is a substantial jump and it definitely underscores the acceptance of the principle.

Can these programs grow? I think it depends on how well we are able to operate them. I remember when we created the SBIR Program, the Small Business Innovation Research Program, which I had a large part in when I worked for Senator Rudman back in the early 1980s. The issue was whether we should allocate one percent to the SBIR program or three percent or as some advocated, 10 percent.

Most of us felt that you had to start slowly, you had to build because the worst thing you can do with a program, as the Chairman well knows, is to throw so much money at it that you create some bad fallout.

Mr. SMITH. Well, we are not talking about an equal amount of money. We are talking about how you should handle the increase in funding for the whole program.

You put a new colt with an old horse and make a team out of them, and the old horse has many ways to take advantage.

Mr. MERCER. Sir, having lived in New Hampshire for many years while I practiced law and having had horses and one of them being an old horse, I can assure the Chairman that I know well of what he speaks.

I think that we also have to recognize that the new programs are going to get the benefit of a lot of what NIST core programs do. In other words, the new Manufacturing Technology Centers, in fact, play off and transfer a lot of the technology that is developed within the core programs, whether it is advanced materials program or the AMRF, the Advanced Manufacturing Research Facility.

In a sense, it is not. You can't really look at it as an isolated segment just because some of that money for budget purposes, looks like it is under a core program. In fact, it will spill over, be very important and be transferred out. As such, it will create a multiplier effect on the money that was, for budget purposes, allocated under an extramural program.

REQUEST TO OMB

Mr. SMITH. Now, what was your request to OMB?

Mr. MERCER. For, in what regard?

Mr. SMITH. For the Office of Technology Administration?

Mr. MERCER. It was $5.8 million, Mr. Chairman.

Mr. SMITH. That is $1 million more than you got. What does that million represent? What was cut out that you wanted?

Mr. MERCER. Most of it was for additional staff for Ms. Wince-Smith's shop. The Under Secretary's office is about $1 million. I believe that we don't want to put too much of an overhead on this. In some respects what we have is a kind of a tabletop fusion experiment because all of these that have been merged together are pre-existing. We want to get four watts out for three watts in.

Mr. SMITH. What would the personnel have been used for?

Ms. WINCE-SMITH. Right now the personnel situation has been static in what was the old Office of Productivity Technology Innovation for a number of years.

Given the importance of the technology competitiveness, the additional resources were to have brought in additional senior policy analysts to do some of the studies as well as to address some outreach activities with industry that would enable these people to go out and interface with the community, hold seminars, training programs, that sort of activity.

In addition, under our Japanese Technical Literature program——

Mr. SMITH. Were they the lowest priority of the things that you requested, the programs that were cut out?

Ms. WINCE-SMITH. They were not the lowest priority. They were to build growth into a program that had been static for a number of years.

Mr. SMITH. Why were they cut out instead of something that had lower priority?

Ms. WINCE-SMITH. The decision was to fund the core mission and to allow the core mission to proceed. The additional resources were a growth element. We have the core based——

Mr. SMITH. You are back to the new colt-old horse story.

Ms. WINCE-SMITH. Let me specifically mention, Mr. Chairman, one example that we weren't able to carry forward with. We do have under the law associated with the Japanese Technical Literature Program Act the requirement to place a full time expert in Tokyo. Of course, that is a fairly expensive operation.

While that is a priority, we still have to be able to operate the program back home. In terms of a choice, I had to make the decision to have the core staff here as opposed to putting an outreach in Tokyo. That gives you an example of the decision-making process there.

Mr. SMITH. Sequestration didn't have a big impact on you; did it?

Mr. MERCER. No.

Mr. SMITH. What is the status of your authorization?

Ms. WINCE-SMITH. The hearing is next week.

Mr. SMITH. Do you expect that bill to move rather rapidly?

Ms. WINCE-SMITH. We hope so.

Mr. SMITH. Are there any big controversies involved in that authorization?

Mr. MERCER. I don't believe so.

NOMINATION OF UNDER SECRETARY

Mr. SMITH. Has the Under Secretary been nominated?

Mr. MERCER. Not officially nominated yet.

Mr. SMITH. What is the status of that?

Mr. MERCER. As I think the Secretary said yesterday, he has been identified and he is going through the process. The FBI, I am sure, is talking to him and to his neighbors and his financial matters are being investigated. We hope, I think, the Secretary said yesterday, and I believe it is a good estimate, that within 30 days we hope for the nomination.

We have had assurances on the Senate side that they will move as quickly as possible once they hear the nomination.

ROLE OF TECHNOLOGY ADMINISTRATION

Mr. ROGERS. This agency was created by the Trade Bill?

Mr. MERCER. The Under Secretary for Technology was created by the NIST Authorization Act for 1989. The units that are currently in the Technology Administration are mandated by that statue but others can be added. It was under Secretary of Commerce Bill Verity, that the Technology Administration was given its structure.

Mr. ROGERS. I am trying to fathom it. I am trying to figure out what you do and what you are supposed to do and whether or not you are doing it.

Give me a couple of sentences on that.

Mr. MERCER. Okay.

Mr. ROGERS. Convincing.

Mr. MERCER. What the Technology Administration represents is a bringing together of three preexisting units that are involved in three interrelated——

Mr. ROGERS. You are getting too long. Give me a sentence on it. What do you do and what are you supposed to do? That is too long.

Mr. MERCER. We are supposed to work within the government and with industry to enhance the competitiveness of U.S. industry in a technological sense.

Mr. ROGERS. How do you go about doing it?

Mr. MERCER. Within the government, we participate in all the interagency policies that deal with technology, trying to bring to the table the issues that industry cares about and that they feel impact on their ability to compete in global markets.

Mr. ROGERS. Why aren't they doing it themselves? If it is a profitable thing for them to make a widget, why do you tell them please make a widget and here is how you do it?

Mr. MERCER. We don't tell them how to make a widget. In the interagency area, in the government area, we work in the examination of policies that impact how or whether they might make a widget, such as tax policy, antitrust policy, some of the macroeconomic policies that are involved. And then working with industry, for instance, through NTIS which provides information to industry that it needs to be competitive. NIST provides both core research to industry that it needs, measurement capabilities, industry people work side by side with NIST scientists to do that work.

Mr. ROGERS. Well, we have NIST. Why do we need this office?

Mr. MERCER. Why do we need which office, NTIS or the Office of Technology Policy or the overhead unit that is——

Mr. ROGERS. What are you asking money for here today?

Mr. MERCER. We are asking for money, in this particular appropriation for the Office of Technology Policy.

Mr. ROGERS. Why do we need that office if we have NIST and the other agencies?

Mr. MERCER. The Office of Technology Policy deals with the policy issues that affect U.S. industry, whereas NIST is much more of an operating arm.

Ms. WINCE-SMITH. May I?

Mr. ROGERS. Please. Please help me out.

Ms. WINCE-SMITH. Let me mention something about my background, if I may.

I spent the last five years as Associate Director in the White House Office of Science and Technology Policy and served under a number of science advisors.

During the course of my tenure, it became clear that technology competitiveness was an issue that was reaching the highest levels of all decision-making. There was hardly an issue that went up through the Cabinet councils that did not have the technology dimension to it.

Yet, as an Administration, we did not have a clear picture of how we should proceed, what should be the role of government, how we could mobilize the tremendous resources and capabilities we have in our country to address the challenges we have.

Of course, you can go through the litany of strategic technology based industry after industry that we have lost major market share. I mean, the most relevant one right now that everyone is so concerned about is health of our semiconductor industry. If we don't have the capability to produce leading-edge semiconductors, we are going to completely concede our whole position in the information age.

There was no place in the government that addressed these issues, except little pieces in the Commerce Department, and National Science Foundation. But nobody had a responsibility to look at this in a cohesive way.

Secretary Verity really took the leadership and came forward in the Administration and said, "It is time for us as a nation to give technology competitiveness as much importance as we have given to the creation of knowledge and scientific understanding." Mr Mercer mentioned that in his testimony.

Commerce, having the traditional role to work with industry, was the logical place to do that. That is where our problem is right now. Our problem is not producing scientific knowledge. It is getting that knowledge into the marketplace in goods and services.

One of the very important examples of what we are accomplishing and will accomplish was the Federal Technology Transfer Act of 1986. It was a bipartisan effort to enable our industry to go into our national laboratories and take advantage of an over $20 billion expenditure in science and technology research. Thirty-seven percent of all the visitors at Oak Ridge National Laboratory are from Japan. Our own industry is not in these national laboratories.

Mr. ROGERS. Say that again.

Ms. WINCE-SMITH. Thirty-seven percent of all the visitors who come to Oak Ridge National Laboratory are from Japan and Japanese industry. Japanese industry, because of our laws, was able to tap into our national laboratories in a way that United States industry could not because we could not give United States industry any proprietary licensing agreement to go in and develop these commercial products.

A lot of this is anecdotal because we have not been able to do the real studies, but experts in our government and outside asserted a lot of technology that our companies now license from Japan, was all developed in our national laboratories.

Those are the kinds of issues that if Commerce doesn't deal with, no one else in the government will. This is a national laboratory. This is a research laboratory. It conducts research.

Mr. ROGERS. Okay, that is what I wanted to hear.

Thank you very much.

Mr. MERCER. The last sentence was—we finally got the good sentence in there.

Mr. ROGERS. She did.

Mr. MERCER. Yes.

Sir, I apologize for not getting there first.

Mr. ROGERS. You have only got $4.6 million. What can you do? You are talking about a major niche in history here. That is somehow getting America back into the competition in the new world. The new world is not military preparedness. It is economic competition.

We are really failing badly. How can you do that with just a tiny agency like you have? You have got $4.6 million, 59 positions. NIST has $160 million and a huge operation.

How can you make that difference?

Mr. ROGERS. Ms. Smith?

Ms. WINCE-SMITH. Internally in the government, I think the fact that the White House gave the Secretary of Commerce leadership in the Economic Policy Council's Working Group on Research, Development Technology and Innovation was a sign that Congress is going to carry forward these views and educate and change the policy in the Administration. We have begun to do that.

Let me give you a specific example. I am sure you are all aware of this debate on picking winners and losers, that, you know, if you invest in HDTV technology, somehow that is going to hurt our investment in biotechnology or investment in advanced materials.

One of the things that we are able to do, and we are working on, with the core staff of experts in these areas is make the case that you can't talk about picking winners and losers in technologies if these are broad based enabling technologies that cut across the whole industrial landscape.

Advanced materials will impact everything from aerospace to how you build automobiles, to a whole range of consumer products. It is not specific. It is not subsidizing any one industry.

Similarly, the HDTV debate was really, I think, a mistake because the issue was never about a big TV set for yuppies to look at. The issue was about a new range of flexible technologies that are going to drive the convergence of computers and telecommunications into one system in the next century.

We are able to move these ideas now into the highest levels of government. I think we are making progress.

You know, do we have enough resources? I am sure every officer who comes before you say they don't have enough resources. But, I think we have a chance to make a contribution inside of government.

HIGH DEFINITION TELEVISION

Mr. ROGERS. Where are you now on pushing HDTV?

Ms. WINCE-SMITH. Well, HDTV is, from our perspective in Commerce, is a subset of the much larger issue of digital imaging technologies, which is one of these enabling technologies mentioned: advanced manufacturing, materials, biotechnology, the whole information science area.

It should never have been separated out for special attention because we need to have, as a nation, a whole portfolio of these technologies. We need to work with industry across the board in all of these, not just one.

I don't think, you know, under our Advanced Technology Program that NIST will be administering—there will be the opportunity for some consortia to be pulled together in areas that could help a future entry into high definition systems area.

Mr. ROGERS. You backed away from HDTV. For a while, the Secretary was really hot to trot about HDTV. All of a sudden, he backed away.

Ms. WINCE-SMITH. Let me clarify that because that is the point I really want to leave you with. The issue was misunderstood inside the Administration. The Commerce Department was not pushing support for a specific industry, i.e., television consumer electronics, and Secretary Mosbacher was pushing that if we don't play as a nation in developing and commercializing a group of technologies that will lead to the next stage of the information age, our economic security will be at risk.

And perhaps, you know, we did not do as good a job as we could have in articulating that. I feel through our work with the Economic Policy Council and with the White House Science Advisor, we made tremendous progress. Commerce brought policy input forward to the White House science advisors. That is now presidential policy. The concept that we developed is in the President's five-year action plan on superconductivity.

That is a very specific policy contribution we made that will have a broad ramification for this Administration.

Mr. ROGERS. I thought you were going to answer my question there for a while on HDTV.

We learned through the space program that it turned out to be a tremendous innovation cow and science cow. All of those other great things we are doing now came out of the space program. It seems to me HDTV could be a similar kind of innovation cow that we could milk for a long time.

Ms. WINCE-SMITH. We have had tremendous commercial advantage from our mission oriented science and technology activities, our aerospace industry, our whole super computer industry coming out of our defense military needs and you mentioned the space needs, health needs.

There is no consensus yet on how, what is the government's role in terms of encouraging, stimulating the commercialization of these enabling technologies. I believe the Commerce Department is the only place in the government that can make that contribution to the policy debate.

If we are not a player, no one else will do that. So our role is very critical to get to the point that I think you are interested in seeing the nation.

Mr. **Mercer.** Mr. Rogers?

Mr. **Rogers.** Yes?

Mr. **Mercer.** If I might, I think the question you asked is a good one about how can a small group hope to create a large effect.

Ms. Wince-Smith referred to the Transfer Technology Act of 1986 in which Congress had this group, which had a role in proposing and helped in drafting.

Under that law, there are now 350 cooperative research and development agreements in place in the government with many, many more pending that are linking our federal laboratory system to work done in collaboration with private industry.

A year ago that number was only 100. In just a little over a year there has been a 250 percent increase in the number of agreements; that is, it was the work that was done by two or three people. Yet, the ripple effect is going to be substantial.

RESPONDING TO DARPA CONCERNS

Mr. **Rogers.** DARPA, the Defense and Advanced Research Projects Agency, tells our committee that they have made what they call sincere efforts to solicit the views of Office of Science and Technology Policy and the Department of Commerce on the subject of what role the Federal Government should play in developing HDTV with commercial applications.

DARPA says that their efforts have been unavailing, that they get no response from either OSTP or the Department of Commerce.

In the absence of what they call a coordinated executive branch position on commercial HDTV, DARPA is proposing to continue with its program of research and development, which is relevant to the military's missions and functions. They seem to be drawing a blank from you people. Is that correct?

Mr. **Mercer.** First of all, NIST does research on HDTV-related technologies. There is no question.

Dr. Lyons will be able to address those. There is no question that there is ongoing research at NIST on technologies that relate to HDTV. Some of those research activities are done in cooperation with DARPA.

I am not myself aware that we have—are you aware?

Ms. **Wince-Smith.** I am in contact with Craig Fields many times every week. We worked so closely together last year. We submitted to him numerous papers on the whole HDTV issue. We were allies on the whole issue.

In terms of a specific initiative, the only place in our budget where we can proceed in the commercialization area he is talking about would be through the advanced technology program, and the whole area of digital imaging technology is one we intend to solicit proposals in.

As Mr. Mercer said, NIST core programs are doing a lot of work that is related to that, and they have cooperative relations with DARPA.

Mr. ROGERS. Mr. Fields' letter to the Chairman Jamie Whitten of the full committee, dated February 2, I think, and much of the committee received February 21—dated February 15 and received on the 21st, which I will be happy to let you look at, says that they have received no response from OSTP or the Department of Commerce.

Ms. WINCE-SMITH. I would certainly go back and investigate that because we worked so closely with them and are very supportive of DARPA's initiatives in all these areas.

We think they are critical to the economic health of the country.

BENEFITS OF HDTV

Mr. ROGERS. Absolutely. I think you are exactly right. HDTV is the new innovation cow that is going to be milked for years to come in dozens of arenas. As a matter of fact, Chairman Smith and I breakfasted one day with the Secretary and we talked about nothing hardly but HDTV. It was a year ago. We came back very excited about it.

Ms. WINCE-SMITH. The Assistant Secretary for Trade Development, and the Technology Administration hosted a meeting in Commerce two weeks ago with the whole flat panel display industry where we invited representatives from not only the horizontal flat panel display producers, and we have four companies left in that area, but also the big integrated computer companies. It was the first time such a meeting like that has ever been held.

The industry response to it was fantastic. This is an example of the government taking leadership to bring together the relevant players in industry to talk about what should be the future role, not the government telling industry what to do, but taking leadership to ask their views.

DARPA was very much involved in that.

Mr. ROGERS. You know what is going to happen on HDTV? It is pretty plain what is happening, what is going to happen.

Just recently we have seen evidence of that with this proposed new consortium of a foreign television company and a cable company and a couple of others forming a consortium to develop satellite based-broadcast, direct-broadcast satellites, where a very small antenna would be placed on top of your television set, bypassing the commercial broadcast stations in this country and cable systems and everybody else. They are going to become irrelevant because people are going to want HDTV when it is available, particularly when you have got an antenna this big sitting on the top of your set 48 miles from nowhere.

It is going to take over the world. Here we sit letting the world go by again. I just can't understand the policy that exists of doing nothing.

That is essentially what we are doing on HDTV. We are letting the world march right by again.

Ms. **Wince-Smith**. Perhaps I shouldn't have mentioned the HDTV, but I wanted to give you an example.

The issue is not really the television issue per se because certainly in a very near term, and Dr. Lyons can speak to this better than I can.

What is really the technology driver of the future is an all digital system that is going to be transmitted across fiber optics. Getting our homes wired with fiber optics and moving in that direction is the wave of the future in this. The television consumer and product is just a way station on the way.

Certainly, we have the technological capability in this country if we pulled together our partners to go to the next generation of technology.

Mr. **Rogers**. What effect does interest like the American Commercial Broadcast Stations have on influencing the policy that you have toward HDTV, for example? I mean, they are the people who cannot broadcast HDTV signals. Technically, they can't do it.

If American consumers are to have HDTV, it will have to come from direct broadcast satellite or cable.

IMPORTANCE OF FIBER OPTICS

Ms. **Wince-Smith**. My concern about HDTV was it is not a TV issue. It is a technology driver. I could say something here that would not be fair to the broadcasting industry or others. I believe ultimately we need to move into the fiber optic transmission world for all information services.

Our Baby Bells cannot carry information services now. They have the capital if it is released to invest in wiring the nation with fiber optics. That is where the Japanese are headed. The Japanese have an incredibly impressive plan to get their country wired with fiber optics. All of these other things are interim measures.

Naturally, the broadcasters who are not in the fiber optic world would be threatened by some of those technology developments that are going to happen one way or the other. So my perspective from the technology policy is one of where we are going in the 21st century.

I don't have the responsibility to be concerned with some of the immediate problems with the broadcasters.

Mr. **Rogers**. You would change the current law and allow the Baby Bells into the fiber optic cable business in spite of the cable companies and in spite of the broadcast industry?

Ms. **Wince-Smith**. Again, from the technology perspective, I think it is critically important for the country to move forward, to wire fiber optics into the home just as we have—this is not my area in terms of my Commerce responsibility so I am treading on my colleague's jurisdiction. But from the technology perspective, this is critical.

The Japanese, the Europeans are doing it. There is no question that Baby Bells have the wealth capacity to do it if they were able to invest in that type of a future.

Mr. **Rogers**. I wish you folks well because you have got the toughest job in the world right now; that is, to get America back in the competition business, and I wish you well.

Thank you.

Thank you, Mr. Chairman.

Mr. SMITH. We may have a couple of more questions, but we will submit them to be answered for the record

Thank you both for your testimony.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Neal Smith

Request to OMB

QUESTION:

What was your budget request to OMB, what items were eliminated from that request, and what was the impact of those reductions on your programs?

ANSWER:

The Technology Administration requested $5,774,000 from OMB, an increase of $1,157,000. An increase of $150,000 was authorized to fund the cost of legal service that is to be provided through the Office of General Counsel. The following items were eliminated from our request.

	FTE	Amount
Policy Analysis, Formulation and Implementation	0	140
Technology Commercialization Implementation	2	493
International Technology Policy and Programs	1	224
Technology Assessment and Project Development	0	150
Total	3	1,007

The effect of the OMB reductions was to reduce the amount of increase in the Technology Administration programs. Therefore, there should be no major program impact.

Impact of Sequestration

QUESTION:

How much was sequestered from your FY 1990 appropriation, and what was the impact of that reduction on your programs?

ANSWER:

The Technology Administration sustained a $25,000 reduction as a result of the sequestration. We have been able to absorb this reduction as a result of personnel attrition. No programs were affected as a result of the sequestration.

Role of the Office

QUESTION:

I understand that several of the scientific and technical organizations in the Department do not report to the Under Secretary for Technology. These include the Patent and Trademark Office, the National Telecommunications and Information Administration, and all of the scientific research and technical activities of the National Oceanic and Atmospheric Administration. What are the reasons for having these organizations report directly to the Secretary and not to your office?

ANSWER:

There is no question that communications and information issues (NTIA), intellectual property protection (PTO), and oceanic and atmospheric research (NOAA) all have a major impact on U.S. technological competitiveness. In all three cases, TA maintains excellent relations with the components in question. To have included any of them would have created far more problems than it would have solved:

- To include NTIA would change the focus of the Under Secretary's emphasis. The Under Secretary would need to devote a considerable amount of time to communications and information technologies (including politically charged social issues such as disputes between broadcasters and cablecasters or rights of networks to own TV shows in syndication) and less time to issues related to other vital emerging technologies and to the important new outreach programs established by the Omnibus Trade and Competitiveness Act of 1988. Indeed,information technology is a key area with NIST heavily involved in associated research as it applies to the transfer of technology.

- The Department considered that (i) PTO had fared substantially better in its current status than it had prior to 1981 when it reported to the Secretary through another management level, and (ii) PTO, in its current status, is an effective advocate of Administration policy in international fora and before the professional associations with which it deals.

- In the case of NOAA, the Department could perceive no logical way to sever NOAA's scientific capability from its other program and policy responsibilities. Such action would have weakened NOAA without materially adding to TA's stature. Environmental issues are a priority of President Bush, so the Department looks to a strong, capable NOAA to ensure that the proper balance between business and environmental interests is struck.

QUESTION:

Would the transfer of the external research programs from NIST to your office require legislation?

ANSWER:

Although NIST was later made a part of the Technology Administration, specific legislation to transfer the functions from NIST was not provided. It is our opinion that legislation would generally be required. Section 5131 of the Omnibus Trade and Competitiveness Act of 1988 established the Advanced Technology Program at NIST and required the Secretary to manage it through the Director thereof. Section 5121 required the Secretary to act through the Director in setting up the Program of Regional Centers for the Transfer of Manufacturing Technology. That same section contained a similar provision with respect to the Boehlert/Rockefeller Program, but it also allowed the Secretary to work with other officials as well.

Program Increase

QUESTION:

You are requesting an increase of $150,000 for FY 1991 to provide general counsel and support services for the Under Secretary. There is no increase in positions associated with this request. Are you going to acquire these services by contract?

ANSWER:

The Department's Office of General Counsel provides legal expertise to all bureaus within the Department. Positions are assigned to Office of General Counsel; however, all cost of the services provided are charged and billed to the bureau for which work is performed.

QUESTION:

Why can't you obtain these services by filling or reassigning one of the 59 positions that are already available to your office?

ANSWER:

In the Department, legal counsel is provided to all bureaus by the Office of General Counsel. In turn, the bureaus reimburse the Office of General Counsel for the cost of providing those services. The 59 positions authorized for the Technology Administration provided for the Under Secretary and his immediate staff and the functions assumed from the Office of Productivity, Technology and Innovation. It did not provide for legal services.

FRIDAY, MARCH 2, 1990.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

WITNESS

DR. JOHN W. LYONS, DIRECTOR

Mr. SMITH. Next, we have the National Institute of Standards and Technology. Here to testify is the Director of National Institute of Standards and Technology, Dr. Lyons.

We will insert the budget justifications submitted in support of this request into the record at this point.

[The budget justification materials follow:]

Department of Commerce
National Institute of Standards and Technology

BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION

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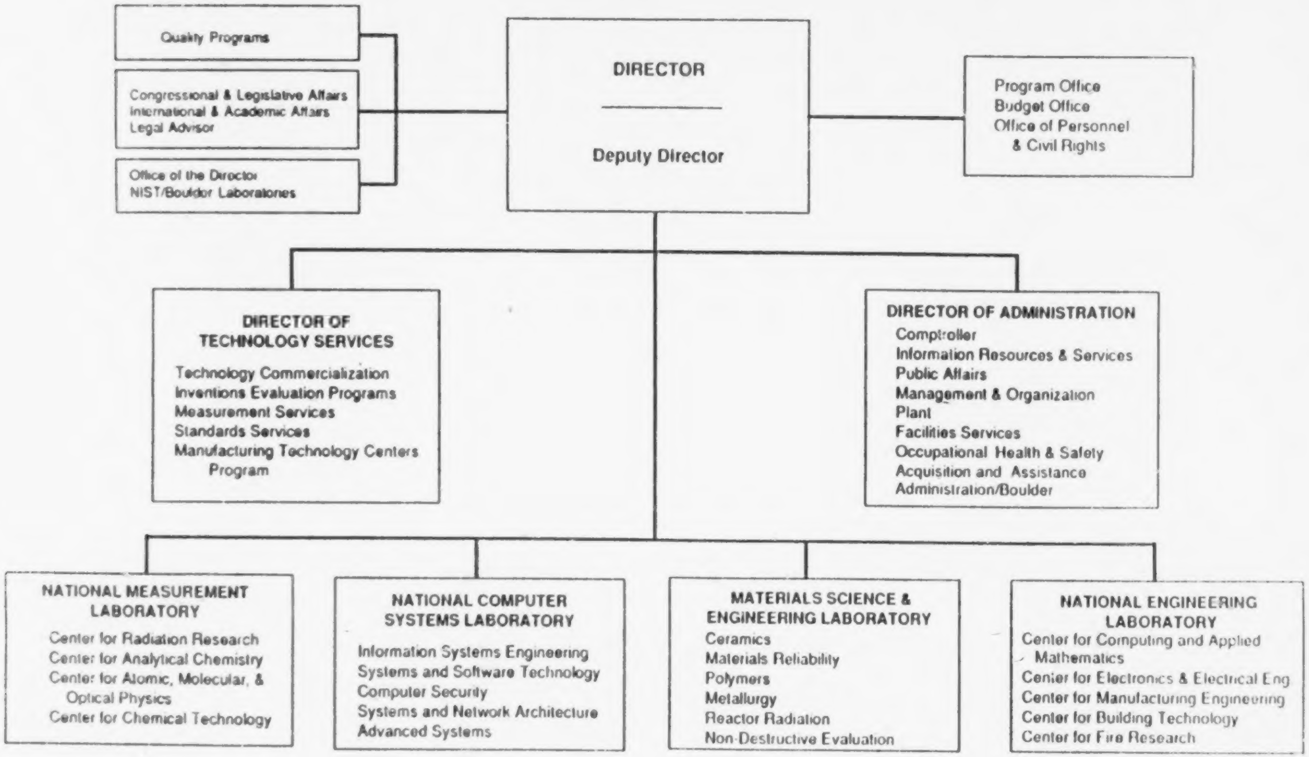
U.S. DEPARTMENT OF COMMERCE
National Institute of Standards and Technology



Quality Programs

Congressional & Legislative Affairs
International & Academic Affairs
Legal Advisor

Office of the Director
NIST/Boulder Laboratories

DIRECTOR

Deputy Director

Program Office
Budget Office
Office of Personnel
& Civil Rights

DIRECTOR OF TECHNOLOGY SERVICES
Technology Commercialization
Inventions Evaluation Programs
Measurement Services
Standards Services
Manufacturing Technology Centers Program

DIRECTOR OF ADMINISTRATION
Comptroller
Information Resources & Services
Public Affairs
Management & Organization
Plant
Facilities Services
Occupational Health & Safety
Acquisition and Assistance
Administration/Boulder

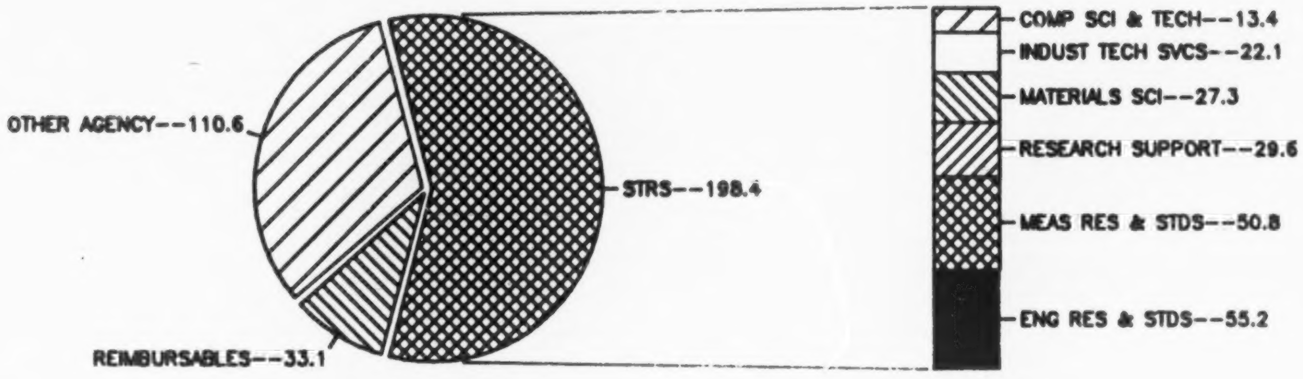
NATIONAL MEASUREMENT LABORATORY
Center for Radiation Research
Center for Analytical Chemistry
Center for Atomic, Molecular, & Optical Physics
Center for Chemical Technology

NATIONAL COMPUTER SYSTEMS LABORATORY
Information Systems Engineering
Systems and Software Technology
Computer Security
Systems and Network Architecture
Advanced Systems

MATERIALS SCIENCE & ENGINEERING LABORATORY
Ceramics
Materials Reliability
Polymers
Metallurgy
Reactor Radiation
Non-Destructive Evaluation

NATIONAL ENGINEERING LABORATORY
Center for Computing and Applied Mathematics
Center for Electronics & Electrical Eng
Center for Manufacturing Engineering
Center for Building Technology
Center for Fire Research

FY 1991 NIST BUDGET REQUEST
(Dollars in millions)



TOTAL FY 1991 BUDGET
BY FUNDING SOURCE

FY 1991 STRS BUDGET
BY PROGRAM

General Statement

The Omnibus Trade Act of 1988 states that NIST's first function is "to assist industry in the development of technology and procedures needed to improve quality, to modernize manufacturing processes, to ensure product reliability, manufacturability, functionality, and cost-effectiveness, and to facilitate the more rapid commercialization ... of products based on new scientific discoveries..."

The second function, tied very closely to the first, is "to develop, maintain, and retain custody of the national standards of measurement, and provide the means and methods for making measurements consistent with those standards, including comparing standards used in scientific investigations, engineering, manufacturing, commerce, industry, and educational institutions with the standards adopted or recognized by the Federal Government."

Our Nation is facing the challenge of increasing world-wide economic competition. The technology-induced rise of new industries and revamping of older industries is taking place in a context of intense global competition. New technologies, new industries, new products and new services mean that a new technological infrastructure -- including measurements, test methods, standards, and evaluated data -- has to be constructed and integrated with the existing infrastructure.

The private sector underinvests in the measurement science and technology which underpins industrial process design, process control, and quality assurance. Because measurement science and technology has broad, multi-industry uses, it is difficult for even an entire industry to capture the returns from investment in it. Therefore, industry underinvests in its production, to the detriment of national economic growth and international competitiveness. Industry sees NIST as the Government's long-term investment in providing the measurement and standards portion of this technological infrastructure in support of overall national economic growth and international competitiveness.

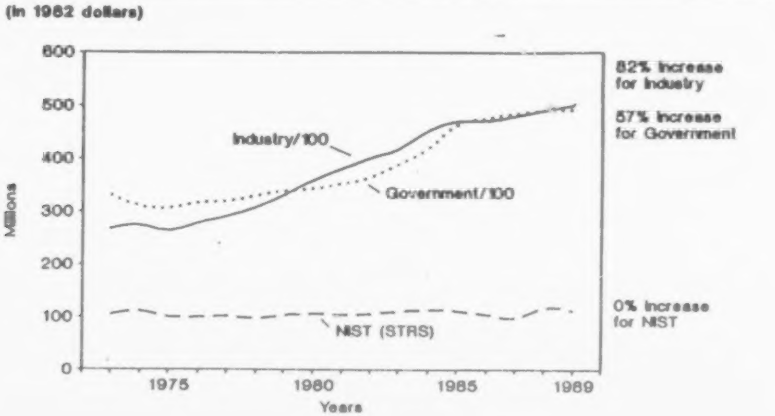
In the mid-1970s, U.S. industry reacted to a growing awareness of declining global market shares and the importance of technology in regaining competitiveness by accelerating its R&D investment. This trend has continued throughout the 1980s; over the last fifteen years, U.S. industry has increased its R&D spending by 82 percent in constant dollars. Yet, U.S. firms continue to struggle to regain competitive positions in international markets. The problem is in commercializing technology. The U.S. is too often not the highest quality, lowest cost producer and we are not first in the marketplace. Foreign industrial competitors have put pressure on their U.S. counterparts by producing high-quality products embodying new technology at competitive prices.

The leading edge of U.S. firms has already begun to make the investments that will allow them to respond to the measurement-intensive productivity and quality challenges in manufacturing. To succeed, they are demanding that NIST produce more and better measurement research and services. In particular, NIST needs to strive for ever higher measurement accuracy; the best firms already require better in-factory measurement than the current "traceability to NIST" can supply and are now pushing the limit of the best measurement capability that can be produced in the NIST laboratories. In addition, entirely new technologies have arisen for which no measurement and standards base exists at all.

Unfortunately, NIST has not been able to keep pace with industry's needs. Had we kept pace with industrial growth in investment in new technology (R&D), NIST would have a fiscal year 1991 appropriation of $310 million ($112 million above the fiscal year 1991 NIST request). Furthermore, $310 million would have to be considered a minimum for achieving parity with industry's own R&D growth, because it takes into account neither the increased pervasiveness of measurements throughout the industrial production process nor the growth in demand for improved measurements resulting from expanded military R&D spending over the last decade.

The pronounced decline in NIST's ability to support U.S. civilian technology is also shown in the following graph. While U.S. industry has responded to increasing competitive pressures by increasing its funding of R&D by 82 percent, the Federal Government's funding of R&D has also increased significantly in real terms (by 57 percent). Most of that increase has been for defense-related technology. Civilian R&D funding has lagged dramatically. As the one Federal laboratory with the mission to support U.S. industry, NIST's ability to respond to the competitiveness crisis has been severely curtailed by zero real (inflation-adjusted) growth in Congressionally-appropriated funds over the past 15 years.

NIST, INDUSTRY, AND FEDERAL R&D FUNDING



Measurements used to be concentrated on after-production acceptance testing and equity in trade (market acceptance). Increased technological complexity and competitive pressures to increase productivity and quality and reduce time-to-market have resulted in a significantly increased and ubiquitous role for measurement:

- "Designing quality in" has increased the demand for measurement in industrial R&D, where NIST research and services improve the efficiency of industrial research and design.
- Controlling production for increased productivity, quality, and flexibility requires measurement-intensive real-time process control.
- The technological complexity of new products requires sophisticated test methods for executing market transactions. NIST research and services help to reduce the risk of introducing these new technologically complex products and services into the market place by producing tools that help buyers and sellers agree on product performance and characteristics.
- The measurement technologies and generic technologies delivered to U.S. industry by NIST have very high leverage on industry's own investments in new technologies and convey multi-industry economic benefits.
- The need for speed in establishing technically sound, competitively neutral test methods and standards in national and world markets has caused U.S. industry to increase its demand for NIST's world-recognized third-party objectivity and technical excellence to lubricate this highly competitive system.

The Scientific and Technical Research and Services appropriation provides funds to support the mission of the National Institute of Standards and Technology. The following is a comparison of the 1990 appropriated level with the 1991 budget request and related data on employment.

	1990 Appropriation Currently Available		1991 Estimate		Increase or (Decrease)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Scientific and Technical Research and Services	1,556	$161,845	1,835	$198,408	279	$36,563	1,495

Highlights of 1991 Changes

Adjustments to base and built-in changes of -25 positions and $7,211,000. The requested adjustments to base include anticipated savings of 25 positions and $641,000 in fiscal year 1991 resulting from A-76 productivity reviews. Also included are: $2,989,000 for fiscal year 1991 cost of the fiscal year 1990 pay raise, $1,422,000 to partially finance the fiscal year 1991 pay raise for GS and SES employees, and $932,000 to cover fiscal year 1991 increases in agency contributions for the Civil Service Retirement System, the Federal Employees' Retirement System, the Federal Insurance Contribution Act, Medicare and Health Insurance premiums.

Program increases totaling 317 positions and $33,802,000:

Increase of 26 positions and $3,122,000 for Scientific Computing Upgrade. These resources will enable NIST to respond to the needs of the scientific staff for more computing power, expanded capacity, greater flexibility, and enhanced software support to meet rapidly growing computational requirements which are of critical importance to NIST's mission. This upgrade will benefit two other Departmental agencies, National Oceanic and Atmospheric Administration/Environmental Research Laboratories and National Telecommunications and Information Administration, who share the scientific computing facility with NIST.

Increase of $1,000,000 for Retrofit of NIST Facilities. This request will support the safety, system capacity and obsolescence requirements of the NIST facilities at Gaithersburg, MD, and Boulder, CO, which are 25 and 35 years old, respectively. NIST has identified $40 million in acute problem areas that must be addressed over the next few years. The requested $1 million plus an additional $.7 million to be collected from reimbursable customers would allow NIST to begin to address the most critical priorities identified in FY 1991 and future years.

Increases of 291 positions and $29,680,000 for four competitiveness initiatives addressing major technological areas. Each of these initiatives emphasizes measurement-related research, quality assurance and process control.

o In "Standards and Information for Quality Improvement" we are requesting 69 positions and $6,630,000 to support a program of measurement research and services that are vital to improving process control and quality assurance in chemical-measurement-intensive industries in general and the biochemical manufacturing industries in particular.

-- Chemical Measurements and Standards (40 positions and $4,330,000) - Quality and overall competitiveness are becoming the determining factors of long-term economic growth and international economic survival of the U.S. Chemical compositional measurement technology is used in virtually all industrial sectors and private/public testing laboratories, including materials, food, glass, chemical, paper and aerospace industries, as well as health care and state, local, and federal laboratories. An estimated 250 million analytical chemical measurements are made each day, costing $50 billion per year. U.S. high technology industries increasingly require sophisticated chemical measurements and standards to regain/maintain their competitive position. Even small improvements in chemical measurement technology could have an enormous impact, raising quality levels and competitiveness across a broad spectrum of U.S. industry. NIST proposes to expand its program in Chemical Measurements and Standards by addressing several projects in a list of 13 priorities developed with industry input.

-- Bioprocess Engineering (29 positions and $2,300,000) - The U.S. currently leads the world in fundamental biochemical research and innovation in the laboratory, but is behind world competition in the capability to move this technology to the marketplace. Japan, Western Europe, and other nations are poised to reap the benefits of their substantial government investment in biochemical R&D, which has out paced U.S. federal biochemical R&D spending. U.S. industry needs measurement and data tools to accelerate commercialization of biochemical products and thus secure a significant share of the world market. With this increase, which builds upon a fiscal year 1988 Presidential initiative, NIST will develop measurement techniques, design data and laboratory-scale processing technology suitable for scale up from the laboratory to the industrial plant. The focus will be on engineering data and procedures needed to convert successful laboratory innovations in biotechnology into commercially viable manufacturing processes.

o In "Information Technologies" we are requesting 86 positions and $9,000,000 to develop a measurement support program for new devices, components, systems, and networks in the next generation of information and communication systems. The U.S. information and communication industry is currently robust and competitive but it faces significant foreign competition from Japan, Europe, and Canada. NIST resources are inadequate to keep pace with the requirements of rapidly advancing information technology. The U.S. is an enormous producer, transmitter and consumer of information as a component of many industries. Industry is unable to develop the measurement techniques and standards needed to assure quality and interoperability because individual private sector entities lack the impartiality and specialized expertise in measurement science. NIST proposes to help industry through expanded programs focused on lightwave measurement technology, integrated services digital network (ISDN), and computer security.

-- Lightwave Measurement Technology (50 positions and $5,500,000) - Will continue expansion of measurement support for components of lightwave systems such as light sources, modulators, and optical integrated circuits. The current lack of standardized measurement methods, materials data, and physical standards inhibits the emergence of competitive opto-electronic components.

-- Integrated Services Digital Network (ISDN) (12 positions and $1,000,000) - Provides industry-wide coordination of standards for multi-vendor ISDN. ISDN technology integrates voice, video, and data in a single communications environment. Development of the needed standard high speed protocols, implementation agreements and tests will accelerate the introduction of ISDN into commercial products by promising that customer data communications can "talk" to each other easily, thus improving our international competitiveness.

-- Computer Security (24 positions and $2,500,000) - The Computer Security Act of 1987 (P.L. 100-235) assigned responsibility to NIST for developing standards and guidelines for non-defense computer security throughout the Federal government. With this increase, NIST will undertake a laboratory-based program involving research, standards development, and technical assistance to user organizations needed to assure the cost-effective security and privacy of sensitive information and protection from viruses in civilian Federal computer systems.

- In "Electronic Technology" we are requesting 67 positions and $6,800,000 to provide a program of technical support services for the electronics industry for new generations of semiconductor, superconductor, and atomic scale devices. Electronic systems are integral parts of defense, communications, transportation, medical care, banking, and manufacturing. A strong electronics industry is essential for maintaining a successful competitive position for any country, including the U.S. Japan is our major competitor: In the semiconductor area, Japan is gaining market share at U.S. expense. In high temperature superconductors, the race for the future market is even. In atomic scale devices, the opportunity exists for the U.S. to establish itself first in a future industry. NIST is the only source of the absolute accuracy and special metrological expertise which the industry needs for measuring properties of starting materials, the results of the successive processing steps applied to those materials, and the characteristics of the finished product. NIST proposes to help industry through expanded programs in each of these areas:

  - Advanced Semiconductors (41 positions and $3,900,000) - Will expand measurement support needed by industry. The semiconductor industry is particularly measurement intensive. As the industry moves into the next generation of integrated circuits with features' dimensions below one micrometer, measurements for many aspects of the new processes cannot be made with the required degree of accuracy or, as in the case of x-ray lithography, entirely new measurement techniques are needed. NIST will develop new measurement methods to support research, development, manufacturing, and procurement tests to facilitate acceptance and sale of U.S. products in domestic and international markets.

  - High Temperature Superconductors (17 positions and $1,900,000) - Will expand measurement support to industry needed to develop products utilizing the new superconductors. The discovery of superconductivity at temperatures above that of liquid nitrogen has stimulated intense international competition for lucrative and diverse new markets for superconducting devices. Superconductors provide an alternative family of compounds for possible use in integrated circuits in electronic devices, promising greater speed and efficiency. However, obstacles to commercialization include brittleness, difficulty in fabrication, and poor current carrying capacity. U.S. industry needs NIST's special competence in developing and gaining acceptance of advanced measurement practices to overcome these obstacles.

  - Atomic Scale Electronics (9 positions and $1,000,000) - Within a decade the current downscaling of integrated circuits will run up against fundamental physical limits. NIST will develop new tests of the fundamental laws of physics and quantum theory, validated and accessible databases, and new measurement methods at the quantum limits of precision with the aim of providing the measurement support which will be needed by industry to develop future generations of microstructure devices based on manipulating individual atoms.

- In "Intelligent Machines and Processes" NIST is requesting 69 positions and $7,250,000 to address fundamental measurement theory and automation that industry needs to control advanced manufacturing and materials processing. Successful competition in international markets will demand the development and use of intelligent machines and processes which will produce materials and goods that have higher quality, lower cost, more modern designs, and functional characteristics tailored to meet rapidly changing market demands. Components of an intelligent machine or process include advanced sensors to measure critical product characteristics, computerized knowledge to give instructions, and physical or process manipulators to perform the work. These elements are integrated into a system under an architecture of real time intelligent control - that is, the machine or process corrects itself without human intervention when something starts to go wrong. Technical barriers to full use include ways to represent process knowledge in forms which machines can interpret; advanced sensors for determining the form and properties of a product during production; and measurement technology and standards. NIST proposes to address these technical barriers through an expanded program in each of these areas:

-- Intelligent Processing of Materials (10 positions and $1,250,000) - Will expand collaborative research with U.S. industry to develop in-process sensors, process models, and the principles of intelligent control needed in the production of materials. A range of disciplines including information technology, nondestructive evaluation, and materials science will be applied to the development of approaches for integration of sensory data, process models, and process control for intelligent processing. The program will develop a range of standards, measurement methods, and testing capabilities for intelligent materials processing.

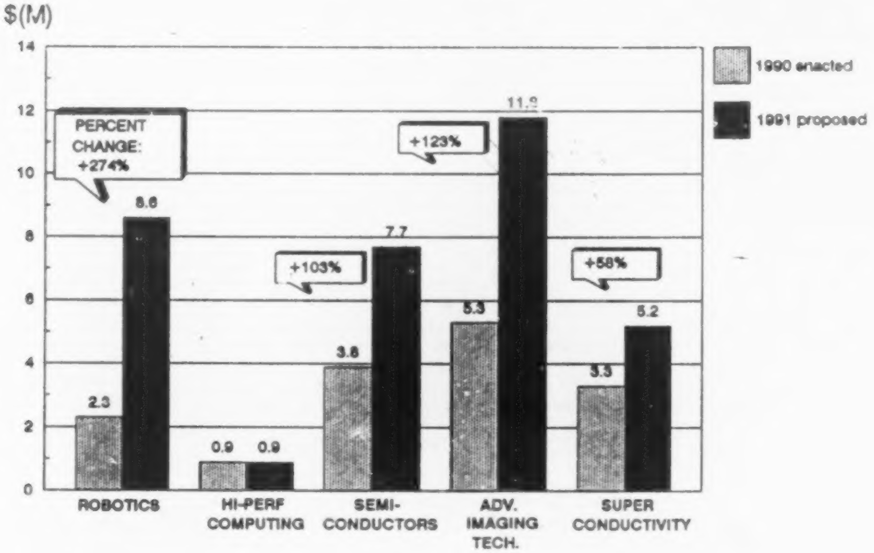
-- High Performance Composites (10 positions and $1,000,000) - Composite materials are an important area of worldwide competition in which the U.S. is no longer a clear leader. Efficient commercialization of composite materials is tied to increased reliability at lower unit cost. The requested increase provides the second increment of funding for the program on high performance composites started by a fiscal year 1988 President's initiative. The inability of current manufacturing techniques to adequately control fiber/matrix adhesion and other interface features is a major barrier for industrial fabrication of reliable composites. Industrial designers need performance data, guidelines for selection of compatible materials and fabrication processes, as well as new and improved techniques for inspection and monitoring of composite properties during production for improved process control and quality assurance.

-- Intelligent Machines (49 positions and $5,000,000) - Will expand collaborative, interdisciplinary research with industry on the processing of sensory data, the computer representation of product-and-process knowledge, and the intelligent control involved in the production of finished goods. Disciplines such as robotics and information technology will be used in the development of the technology base needed to measure the performance of and establish standards for future generations of intelligent machines. NIST will also spearhead a national plan for the development of product and process knowledge, system framework, and standards to enable U.S. industry to design and manufacture products more competitively.

The graph below provides a comparison of NIST's present and requested funding of various high technology programs. This comparison illustrates the Administration's commitment to provide the measurement-related research necessary for this country's technological future.

NIST FUNDING FOR SELECTED HIGH TECHNOLOGY PROGRAMS

IN MILLIONS OF DOLLARS



NOTE: Funding represents budget authority.

Program decreases totaling 13 positions and $4,450,000:

Decreases in Alternative Refrigerants and Ignition of Upholstery. The Administration requests full funding of the Fire and Building Research programs for fiscal year 1991, excluding two earmarked projects. A decrease of 3 positions and $250,000 is requested for new fire research on ignition of upholstery. A decrease of 3 positions and $250,000 is requested for study of alternative refrigerants. These two projects were added to NIST's budget in the fiscal year 1989 appropriation.

Decreases in the Industrial Technology Services program. A program reduction of 3 positions and $2,500,000 is requested for the Manufacturing Technology Centers program. The requested funding level of $5,000,000 will allow for continuation of the program. A decrease of 1 position and $150,000 is requested for evaluation of non-energy related inventions. Evidence indicates that this program, unlike the Department of Energy Program that it was to be modeled on, would not provide a reasonable return on the Government's investment. A decrease of 3 positions and $1,300,000 is requested for the State Technology Extension Program. This program duplicates functions being carried out by SBA's Small Business Innovative Research Program, the Federal Laboratory Consortium, and many state programs.

Reimbursable Program

NIST's reimbursable services consist of technical work performed for other Federal agencies, State, and local governments, and the private sector, including calibrations and special tests, advisory services, and the sale of Standard Reference Materials. The unique measurements and standards expertise developed with appropriated funding gives NIST the capability to perform these services on a reimbursable basis. NIST accepts other agency work based on an established set of criteria which include (1) the need for traceability of measurements to national standards; (2) the need for work which cannot or will not be addressed by the private sector; (3) work supported by legislation that authorizes or mandates certain services; (4) work which would result in an unavoidable conflict of interest if carried out by the private sector or regulatory agencies; and (5) requests by the private sector for NIST action or services.

Reorganization

The fiscal year 1991 budget reflects the reorganization announced to Congress in fiscal year 1989. The new program structure regroups some programs between the Measurement Research and Standards and the Engineering Research and Standards subactivities and shifts the ongoing programs associated with the Director of Technology Services to the subactivity Industrial Technology Services.

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Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Appropriation: Scientific and Technical Research and Services

Page No.	Summary of adjustments to base		Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990	Pos./BA			1,556	$163,609
		FTE/Obl.			1,681	180,455
	Sequester applied, 1990	Pos./BA			0	-1,764
		FTE/Obl.			0	0
	Appropriation currently available, 1990	Pos./BA			1,556	161,845
		FTE/Obl.			1,681	180,455
NIST-20	Adjustment for 1991 pay raise and related costs	Pos./BA	0	1,422		
		FTE/Obl.	0	1,422		
NIST-21	Other cost changes	Pos./BA	(25)	5,789		
		FTE/Obl.	(25)	5,789		
	Subtotal, adjustments to base and built-in changes	Pos./BA			0	7,211
		FTE/Obl.			0	7,211
	1991 Base	Pos./BA			1,531	169,056
		FTE/Obl.			1,656	168,695

Page No.	Comparison by activity		1989 Actual		Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Measurement and engineering research and standards											
NIST-29	Measurement research and standards	Pos./BA	457	$41,573	449	$41,666	443	$43,139	521	$50,769	78	$7,630
		FTE/Obl	488	40,540	483	42,609	475	42,978	525	47,798	50	4,820
NIST-51	Materials science and engineering	Pos./BA	257	23,544	255	23,157	251	25,045	271	27,295	20	2,250
		FTE/Obl	276	22,966	274	24,202	270	24,945	284	26,774	14	1,829

Page No.	Comparison by activity		1989 Actual Per-sonnel	1989 Actual Amount	Currently Available Per-sonnel	Currently Available Amount	1991 Base Per-sonnel	1991 Base Amount	1991 Estimate Per-sonnel	1991 Estimate Amount	Increase (Decrease) Over 1991 Base Per-sonnel	Increase (Decrease) Over 1991 Base Amount
NIST-65	Engineering measurements and standards	Pos./BA	441	37,340	438	39,300	430	39,397	581	55,197	151	15,800
		FTE/Obl	472	38,231	469	40,136	460	39,297	532	48,917	72	9,620
NIST-97	Computer sciences and technology	Pos./BA	124	9,488	124	9,440	123	9,919	159	13,419	36	3,500
		FTE/Obl	133	9,377	139	9,625	137	9,919	164	13,419	27	3,500
NIST-113	Industrial technology services	Pos./BA	93	22,420	99	25,976	97	26,086	90	22,136	(7)	(3,950)
		FTE/Obl	100	15,156	104	37,502	104	26,086	97	22,136	(7)	(3,950)
NIST-127	Research support activities	Pos./BA	192	24,635	191	24,306	187	25,470	213	29,592	26	4,122
		FTE/Obl	206	23,651	212	25,876	210	25,470	210	29,592	0	4,122
	Total, National Institute of Standards and Technology	Pos./BA	1,564	159,000	1,556	163,845	1,531	169,056	1,835	198,408	304	29,352
		FTE/Obl	1,675	149,919	1,681	180,455	1,656	168,695	1,812[1]	188,636	156[1]	19,941
Financing from transfers: Earthquake investigation funds from "Unanticipated Disaster Needs."						(2,000)						
Appropriation currently available, 1990						161,845						

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

[1] Total FTE increased to reflect first year employment needs of requested program changes. See page NIST-147.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
Page No.	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
	Measurement and engineering research and standards:											
NIST-30	Measurement research and standards	WCF transfers..	0	0	0	$239	0	$161	0	$2,971	0	$2,810
		Reimbursable FTE/Obl..	363	32,513	363	35,671	363	36,570	363	36,570	0	0
		Subtotal..	363	32,513	363	35,910	363	36,731	363	39,541	0	2,810
NIST-52	Materials science and engineering:	WCF transfers..	0	0	0	100	0	100	0	521	0	421
		Reimbursable FTE/Obl..	157	15,807	157	18,349	157	18,454	157	18,454	0	0
		Subtotal..	157	15,807	157	18,449	157	18,554	157	18,975	0	421
NIST-66	Engineering measurements and standards	WCF transfers..	0	0	0	200	0	100	0	6,280	0	6,180
		Reimbursable FTE/Obl..	568	45,207	568	48,729	568	50,699	568	50,699	0	0
		Subtotal..	568	45,207	568	48,929	568	50,799	568	56,979	0	6,180
NIST-98	Computer sciences and technology	WCF transfers..	0	0	0	0	0	0	0	0	0	0
		Reimbursable FTE/Obl..	152	13,369	152	15,810	152	14,758	152	14,758	0	0
		Subtotal..	152	13,369	152	15,810	152	14,758	152	14,758	0	0

Page No.	Comparison by activity		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NIST-114	Industrial Technology											
	Support	WCF transfers	0	0	0	0	0	0	0	0	0	0
		Reimbursable FTE/Obl	111	13,121	111	13,909	111	14,744	111	14,744	0	0
		Subtotal	111	13,121	111	13,909	111	14,744	111	14,744	0	0
NIST-128	Research support											
	activities	WCF transfers	0	0	0	0	0	0	0	0	0	0
		Reimbursable FTE/Obl	61	8,673	61	8,145	61	8,433	61	8,433	0	0
		Subtotal	61	8,673	61	8,145	61	8,433	61	8,433	0	0
	Total Requirements	WCF transfers	0	0	0	539	0	361	0	9,772	0	9,411
		Reimbursable FTE/Obl	1,412	128,690	1,412	140,613	1,412	143,658	1,412	143,658	0	0
		Total	1,412	128,690	1,412	141,152	1,412	144,019	1,412	153,430	0	9,411

Department of Commerce
National Bureau of Standards
Scientific and Technical Research and Services
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase (Decrease) over 1991 Base
Total Obligations	$149,919	$180,455	$168,695	$188,636	$19,941
Financing					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Trust funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries	(157)	0	0	0	0
Unobligated balance, start of year	(9,576)	(17,149)	0	0	0
Unobligated balance transferred	156	0	0	0	0
Unobligated balance, end of year	17,149	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	157,491	163,306	168,695	188,636	19,941
Transferred to other accounts	1,509	539	361	9,772	9,411
Transferred from other accounts		(2,000)			
Sequester		1,764			
Appropriation	159,000	163,609	169,056	198,408	29,352

Department of Commerce
National Bureau of Standards
Working Capital Fund
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase (Decrease) over 1991 Base
Total Obligations	$128,690	$141,152	$144,019	$153,430	$9,411
Financing					
Offsetting collections from:					
Federal funds	(111,030)	(121,022)	(123,643)	(123,643)	0
Trust funds	0	0	0	0	0
Non-Federal sources	(17,065)	(19,591)	(20,015)	(20,015)	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	(26,649)	(27,719)	(27,719)	(27,719)	0
Unobligated balance transferred	(156)	0	0	0	0
Unobligated balance, end of year	27,719	27,719	27,719	27,719	0
Unobligated balance lapsing	0	0	0	0	0
Budget Authority	1,509	539	361	9,772	9,411
Transferred from other accounts	(1,509)	(539)	(361)	(9,772)	(9,411)
Appropriation	0	0	0	0	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services

Summary of Adjustments to Base

(Dollar amounts in thousands)

	Increase/(Decrease)		
	Perm Pos.	FTE	Amount
Adjustments			
Gramm-Rudman-Hollings Reductions	0	0	0
Adjustment for 1990 Pay Increase and Related Costs	0	0	+$2,989
Adjustment for 1991 Pay Increases and Related Costs	0	0	+1,422
Management savings (A-76)	(25)	(29)	(641)
Annualization of Prior Year Positions	0	4	0
Subtotal adjustments	(25)	(25)	+3,770
Estimated Cost Changes:			
Extra compensable day	0	0	+315
Civil Service Retirement System	0	0	(171)
Federal Employees' Retirement System	0	0	+323
Thrift Savings Plan	0	0	+49
Federal Insurance Contributions Act (FICA)	0	0	+167
Medicare	0	0	+10
Health Insurance Premium	0	0	+554
Employees' Compensation Fund	0	0	+18
Rental payments to others	0	0	+7
Communications, utilities, and miscellaneous charges	0	0	(91)
Printing and reproduction	0	0	+34
Other services	0	0	+912
Supplies and materials	0	0	+953
Equipment	0	0	+361
Subtotal, estimated cost changes	0	0	+3,441
Total Adjustments to Base	(25)	(25)	+7,211

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services

Justification of Adjustments to Base

(Dollar amounts in thousands)

Adjustments	Increase/Decrease		
	Perm. Pos.	FTE	Amount
Gramm-Rudman-Hollings Reductions:			
Total G-R-H reductions in 1991	0	0	($1,764)
Sequester applied in 1990 (included in base)	0	0	+1,764
Additional reduction required for full year effect in FY 1991 of FY 1990 sequester (ATB)	0	0	0
Adjustment for 1990 pay increase and related costs:			
Total cost in FY 1990 of pay increase	0	0	2,241
Less amount absorbed in FY 1990	0	0	(2,241)
Anticipated FY 1990 pay increase supplemental	0	0	0
Additional amount in FY 1991 to provide full-year cost of pay increase	0	0	2,989
Less amount absorbed in FY 1991	0	0	0
Subtotal, adjustment for 1990 pay increase	0	0	2,989

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, NIST is absorbing the full cost of this pay increase.

Increased costs of $2,989,000 in fiscal year 1991 for the fiscal year 1990 pay increase include $2,808,000 for civilian statutory pay increases and $181,000 for wage board pay increases.

Adjustments	Perm. Pos.	FTE	Amount
Adjustment for 1991 pay increase and related costs:			
Total cost in FY 1991 of general pay increase	0	0	$2,104
Less amount absorbed	0	0	(1,052)
Subtotal, adjustment for 1991 general pay increase	0	0	1,052
Total cost in 1991 of SES pay increase	0	0	740
Less amount absorbed	0	0	(370)
Subtotal, adjustment for 1991 SES increase	0	0	370
Total adjustment for 1991 pay increases	0	0	1,422

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

Management Savings (A-76)	(25)	(29)	(+641)

Anticipated Savings resulting from productivity reviews in fiscal year 1991 will result in incremental savings of 25 permanent positions and $641,000.

Annualization of prior year positions	0	4	0

The fiscal 1990 program increases financed 4 total FTE's associated with 6 permanent positions. An additional 2 FTE's are required at the fiscal year 1991 operating level. Also required are 2 FTE's for annualization of prior year positions associated with the Cold Neutron Facility.

Extra compensable day	0	0	+$315

The cost of one extra compensable day in fiscal year 1991 was calculated by dividing the fiscal year 1990 estimate for personnel compensation and benefits by 260 compensable days.

Personnel benefits	0	0	+$950

Civil Service Retirement System	(171)
Federal Employees' Retirement System	+323
Thrift Savings Plan	+49
Federal Insurance Contributions Act (FICA)	+167
Medicare	+10
Health Insurance Premium	+554
Employees' Compensation Fund	+18

Civil Service Retirement System (-$171,000) - The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by retirement systems will drop from 67.9 percent for CSRS in fiscal year 1990 to 64.4 percent in fiscal year 1991. This will result in a decrease of $171,000 in the cost of CSRS contributions. The calculations for decreased costs for CSRS contributions are:

Payroll subject to retirement systems ($69,602,000)	
Cost of CSRS contributions in FY 1991 ($69,602,000 x .6440 x .07)	$3,137,658
Costs of CSRS contributions in FY 1990 ($69,602,000 x .6790 x .07)	3,308,183
Decrease in the cost of CSRS contributions	(170,525)

Federal Employees' Retirement System (+$323,000) - The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 32.1 percent in fiscal year 1990 to 35.60 percent in fiscal year 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.00 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($69,602,000)	
Basic benefit cost in 1991 ($69,602,000 x .3560 x .1300)	$3,221,181
Basic benefit cost in 1990 ($69,602,000 x .3210 x .1297)	2,897,789
Increase in basic benefit contributions (1991-1990)	+323,392

Thrift Savings Plan (+$49,000) - The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of eligible employees covered by the Thrift Savings Plan will rise from 32.1 percent to 35.6 percent. We estimate the agency contributions for the Thrift Savings Plan will average 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Thrift plan cost in 1991 ($69,602,000 x .3560 x .02)	$495,566
Thrift plan cost in 1990 ($69,602,000 x .3210 x .02)	446,845
Total Thrift Savings Plan Increase	+48,721

Federal Insurance Contributions Act (FICA) (+$167,000) - Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in fiscal year 1991 from $50,025 in fiscal year 1990, and the OASDI tax rate will increase from 6.17 percent in fiscal year 1990 to 6.20 percent in fiscal year 1991. This will result in an increase of $167,000 as follows:

OASDI:

FERS payroll subject to FICA tax in 1991 ($69,602,000 x .3560 x .96)	$23,787,180	
FERS OASDI tax in 1991 ($23,787,180 x .0620)		1,474,805
FERS payroll subject to FICA tax in 1990 ($69,602,000 x .3210 x .95)	21,225,130	
FERS OASDI tax in 1990 ($21,225,130 x .0617)		1,309,590
Increase (1991 - 1990)		+165,215
Other payroll not covered by retirement systems	$2,444,000	
Other payroll subject to FICA tax in 1991 ($2,444,000 x .96)	2,346,240	
OASDI tax in 1991 ($2,346,240 x .0620)		$145,467
Other payroll subject to FICA tax in 1990 ($2,444,000 x .95)	2,321,800	
OASDI tax in 1990 ($2,321,800 x .0617)		143,255
Increase (1990 - 1989)		+2,212
Total OASDI increase		+167,427

Medicare (+$10,000):

All employees are subject to medicare contributions. The rate will remain at 1.45 percent, but the percentage of payroll subject to FICA will increase as follows:

Total payroll	72,046,000	
Total payroll subject to FICA in 1991 ($72,046,000 x .96)	69,164,160	
Total payroll subject to FICA in 1990 ($72,046,000 x .95)	68,443,700	
Increase in payroll subject to FICA (1991 - 1990)	720,460	
Increase in Medicare tax ($720,460 x .0145)		+10,447

Health insurance premium (+$554,000) - NIST's contribution to the Federal Health Benefit Program increased by $972,000 as a result of the changes by the insurers effective January 1, 1989. The STRS share of this increase is $554,000. The total increase was computed based on employee participation in the various health benefit plans and the associated increases.

Employees' Compensation Fund (+$18,000)	+18,000

The Employees' Compensation Fund Bill for STRS for the year ending June 30, 1989 is $18,000 higher than the bill for the year ending June 30, 1988. The charges will be reimbursed to the Department of Labor pursuant to Public Law 86-767, as amended.

Rental payments to others	0	0	+$7

The Joint Institute for Laboratory Astrophysics (JILA) is the organizational entity of the cooperative agreement between the University of Colorado and NIST. The University of Colorado and NIST share a building constructed for JILA on the University campus. The rental agreement provides for annual, built-in, inflationary increases based on the Consumer Price Index. These built-in increases are expected to cost NIST an additional $13,000 fiscal year 1991. The STRS share of this increase is $7,000.

Communications, utilities, and miscellaneous charges	0	0	($91)
Federal Telecommunications System	(220)		
Rental of equipment	+94		
Utilities	+35		

Federal Telecommunications System-2000 (-$220,000) - Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

Rental of equipment (+$94,000) - The $94,000 increase was calculated by applying the OMB 1991 GNP price deflator (4.0%) to the fiscal year 1990 estimate of $2,357,000 for ADP equipment, office copying equipment, and other equipment rentals.

Utilities (+$35,000) - This adjustment to base is required to pay the additional cost of water at the Gaithersburg site and flood control at the Boulder site, arising from rate increases in fiscal year 1989. The STRS share of this increase is $35,000.

Printing and reproduction .... 0 0 +$34

The cost of printing and binding, including labor, paper, and commercial procurement prices, is projected to rise $32,000. The increase was calculated by applying a 7 percent inflation factor to the fiscal year 1990 estimate of $481,000 for printing and reproduction, based on Government Printing Office Circular Letter No. 307.

Other services .... 0 0 +$912

Increases in costs for recurring contractual support services have been experienced. This is due principally to increases in salary costs for the services performed, increases in costs for materials and supplies, increases in cost of computer support and increases for equipment maintenance. A detail by service follows:

Services	FY 1990 Budget	Revised Estimate	Increase in Cost
Maintenance of Equipment	$2,490	$2,663	$173
Working Capital Fund, General Administration	1,164	1,220	56
Maintenance on Consolidated Scientific Computer System	1,611	1,829	218
Mountain Administrative Support Center (MASC)	944	1,003	59
Agreement between NIST and MASC for operation of CYBER 840	1,326	1,668	342
Departmental reimbursements	410	446	36
Agreement between NIST and the Joint Institute for Laboratory Astrophysics for support services	401	429	28
Total	8,346	9,258	912

Supplies and materials .... 0 0 +$953

Laboratory and general supplies	+274
Scientific publications and journals	+79
Reactor fuel cycle	+600

Laboratory and general supplies (+$274,000) - GSA supply costs can be attributed to a 13.9 percent increase in costs added to the total value of GSA orders and the OMB 1991 GNP price deflator (4.0%) applied to cost of supplies from other vendors. An increase of $274,000 over the fiscal year 1990 estimate of $6,524,000 is required.

Scientific publications and journals (+$79,000) - NIST, a research oriented institution, must keep current with literature on relevant research topics. An analysis of actual costs incurred by the NIST Research Information Center for scientific journal purchases between calendar years 1988 and 1989, showed cost increases of 17.3 percent. This increase is primarily due to the large increases in the cost of foreign journal subscriptions. These increases can be attributed to several factors: 1) subscription price increases at double or triple the rate of inflation; 2) a sharp decline in the value of the dollar on foreign exchange markets; and 3) differential pricing by foreign publishers. The percent of increase applied to the fiscal year 1990 estimate of $456,000 reflects an additional requirement of $79,000.

Reactor fuel cycle (+$600,000) - Two separate adjustments to base regarding the heavy water moderator at the NIST Research Reactor are required to ensure its continued, safe operation.

An adjustment of $400,000 is required to cover the increased cost for heavy water usage. The NIST Research Reactor heavy water is on loan from the Department of Energy (DOE), and NIST is required to reimburse DOE (Savannah River) for reduction in inventory due to normal operating losses, i.e., evaporation. The required adjustment is based on communications from DOE that have identified losses already incurred and expected for the next contract period and that indicate an increase of almost 150 percent in the replacement cost of heavy water.

An adjustment of $200,000 is required to cover the increased cost of low tritium content heavy water for the NIST Research Reactor. The heavy water inventory must be reprocessed periodically to reduce tritium content, and thereby reduce radiation exposures. DOE has previously processed the NIST Research Reactor inventory at Savannah River, however, the capability to do this reprocessing is no longer available at Savannah River or elsewhere in the U.S. The DOE Office of Energy Research has the lead responsibility for obtaining this reprocessed heavy water for NIST and other national research reactors. The required adjustment is based on estimates from potential Canadian sources.

Equipment		0	0	+$361
Equipment depreciation	+$356			
Library books	+5			

Equipment depreciation (+$356,000) - Funding of $356,000 is requested to finance the STRS portion of the increase in equipment depreciation cost caused by the effects of inflation. The increase was calculated by applying the OMB 1991 GNP price deflator to the fiscal year 1990 STRS estimate of $8,892,000 for equipment depreciation. The additional appropriated funds will be allocated to the NIST operating units to finance depreciation charges paid to the NIST Working Capital Fund. The fiscal year 1986 Authorization Bill for NIST revised the NIST Organic Act language so that the Working Capital Fund could retain the additional collections necessary to replace equipment at its current replacement value.

Library books (+$5,000) - The NIST Research Information Center is an important research tool used by the NIST's scientific and technical staff and it is essential that the research books available at the site are kept current. Based on actual costs increase of 5.5 percent between calendar years 1988 and 1989, the required increase for library books in fiscal year 1991 is $8,000. The STRS share of this expense is $5,000.

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DEPARTMENT OF COMMERCE

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Appropriation Account: Scientific and Technical Research and Services

Appropriation Language and Code Citations:

1. For necessary expenses of the National Institute of Standards and Technology,

15 U.S.C. 272; 273; 275c; 278b-e; 278g-1; 278g-2; 278g-3; 278h-o
15 U.S.C. 290b-f
15 U.S.C. 1454(d), 1454(e)
15 U.S.C. 1512
40 U.S.C. 759(f)

15 U.S.C. 272; 273; 278b-e; 278g-1; 278g-2 provide basic authority for the performance of the functions and activities of the National Institute of Standards and Technology.

15 U.S.C. 278g-3 gives NIST responsibility for developing standards and guidelines for Federal computer systems, and for developing standards and guidelines needed to assure cost effective security and privacy of sensitive non-national-security-related information in Federal computer systems.

15 U.S.C. 278h authorizes appropriations for performance and functions of the National Institute of Standards and Technology.

15 U.S.C. 278i-o provides that NIST shall justify all fee charges for standard reference materials, directs that NIST shall provide assistance for the creation and support of Regional Centers for the Transfer of Manufacturing Technology, technical assistance to state technology programs, establishes an Advanced Technology Program, and directs that user fees cannot be charged research associates without direct statutory authority.

15 U.S.C. 290b-f direct the Secretary of Commerce to provide for the collection, compilation, critical evaluation, publication, and dissemination of standard reference data.

15 U.S.C. 1454(d), 1454(e) assign responsibilities to the Secretary of Commerce to determine when undue proliferation exists, to develop and publish voluntary product standards, and to maintain surveillance of such standards.

15 U.S.C. 1512 provides "it shall be the province and duty of said Department to foster, promote, and develop the foreign and domestic commerce... of the United States."

40 U.S.C. 759(f) authorizes the Secretary of Commerce to undertake research in the science and technologies of automatic data processing, computer and related systems, and to establish uniform Federal standards.

2. $198,408,000 to remain available until expended;

no specific authority

31 U.S.C. 718 - Appropriations in annual Appropriation Acts not permanent, states: "No specific or indefinite appropriations... shall be construed to be permanent or available continuously... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriations Act in which it is contained makes provision."

3. of which not to exceed $9,772,000 may be transferred to the "Working Capital Fund";

15 U.S.C. 278b

15 U.S.C. 278b provides in part: "The National Institute of Standards and Technology is authorized to utilize in the performance of its functions the Working Capital Fund..."

4. and of which not to exceed $10,095,000 shall be available for construction of research facilities.

15 U.S.C. 278d

15 U.S.C. 278d provides in part: "That no improvement shall be made nor shall any building be constructed under this authority at a cost in excess of $250,000 unless specific provision is made therefore in the appropriation concerned."

Additional authorizing legislation will be proposed for fiscal year 1991.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Fundamental physical measurements and standards	Pos./BA.	206	$20,082	203	$19,916	200	$20,528	209	$21,528	9	$1,000
	FTE/Obl..	220	19,255	216	20,266	212	20,367	218	21,192	6	825
Radiation measurements and standards	Pos./BA..	67	5,888	66	5,936	64	6,094	64	6,094	0	0
	FTE/Obl..	72	5,718	72	6,265	70	6,094	70	6,094	0	0
Analytical chemical measurements and standards	Pos./BA..	51	4,379	50	4,261	50	4,459	90	8,789	40	4,330
	FTE/Obl..	55	4,590	56	4,383	56	4,459	78	6,369	22	1,910
Chemical properties and processes	Pos./BA..	133	11,224	130	11,553	129	12,058	158	14,358	29	2,300
	FTE/Obl..	141	10,977	139	11,695	137	12,058	159	14,143	22	2,085
Total requirements	Pos./BA..	457	41,573	449	41,666	443	43,139	521	50,769	78	7,630
	FTE/Obl..	488	40,540	483	42,609	475	42,978	525	47,798	50	4,820

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards

	1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Fundamental physical measurements and standards WCF transfers.......	0	0	0	$239	0	$161	0	$336	0	$175
Reimbursable FTE/Obl.......	54	6,408	54	6,542	54	6,924	54	6,924	0	0
Subtotal.......	54	6,408	54	6,781	54	7,085	54	7,260	0	175
Radiation measurements and standards										
WCF transfers.......	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl.......	87	8,026	87	8,157	87	8,574	87	8,574	0	0
Subtotal.......	87	8,026	87	8,157	87	8,574	87	8,574	0	0
Analytical chemical measurements and standards WCF transfers.......	0	0	0	0	0	0	0	2,420	0	$2,420
Reimbursable FTE/Obl.......	102	8,484	102	9,848	102	9,280	102	9,280	0	0
Subtotal.......	102	8,484	102	9,848	102	9,280	102	11,700	0	2,420
Chemical properties and processes										
WCF transfers.......	0	0	0	0	0	0	0	215	0	215
Reimbursable FTE/Obl.......	120	9,595	120	11,124	120	11,792	120	11,792	0	0
Subtotal.......	120	9,595	120	11,124	120	11,792	120	12,007	0	215
Total requirements										
WCF transfers.......	0	0	0	239	0	161	0	2,971	0	2,810
Reimbursable FTE/Obl.......	363	32,513	363	35,671	363	36,570	363	36,570	0	0
Total.......	363	32,513	363	35,910	363	36,731	363	39,541	0	2,810

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
MEASUREMENT RESEARCH AND STANDARDS

Goals and Objectives

Goals:

The goal of this subactivity is to strengthen the international competitiveness and leadership of U.S. industry through the development and transfer of chemical and physical measurement methods, standards, materials, data, and related science and technology. These outputs support the major DoC goal of (1) promoting the development and application of science and technology in U.S. industries, (2) making departmental laboratories available for proprietary research, and (3) increasing the acceptance of international technical standards based on U.S. technology.

Objectives:

o Extend the accuracy, sensitivity, and range of existing measurement standards and services as well as develop new measurement methods, standards and data needed to keep pace with the rapid evolution of instruments, devices, and consumer/industrial products.
o Provide the measurement support system for the safe and effective utilization of ionizing radiation in medical diagnostics and therapy, in emerging industrial applications such as radiation processing and measurement methods underpinning a wide variety of industrial applications of optical radiometry.
o Provide measurement methods, standards, and data on biomolecules, including thermodynamic properties data and new analytical methods for the detection and separation of biomolecules needed by industry to understand chemical reaction processes and ensure measurement quality assurance during all stages of biotechnology processes.
o Develop the measurement science base for better understanding of chemical processes for detecting and accurately measuring chemical components in complex mixtures, and for developing new ways to measure physical parameters.
o Respond to the measurement and data needs of chemical and related industries by providing measurement methods, standards, and data, including real-time on-line measurement methods of product concentrations, advanced separation techniques, and methods to extend laboratory processes to a commercial scale.
o Develop methods to improve measurement capability and quantitative understanding of basic physical processes that underlie measurement science, including research at the frontiers of atomic, molecular, and optical physics.

Base Program

Measurements in the U.S. economy now cost more than $200 billion annually. The principal uses of measurements are as appraisal tools in quality assurance applications affecting products, processes, environmental quality, and health care. High technology areas such as optoelectronics, communications, advanced materials, aerospace, defense systems, biotechnology, and medical diagnosis are a major and rapidly growing part of domestic and international economies. High technology areas incur measurement costs three to five times higher than such costs in traditional technologies. In addition, such areas demand greater measurement accuracy and sophistication, in many cases challenging state-of-the-art capabilities. In the U.S., all scientific and commercial measurements are ultimately tied to physical and/or chemical measurement standards developed and maintained by NIST. Accordingly, NIST must maintain a national measurement support system and provide access to this system by tens of thousands of large and small firms, hospitals, test laboratories, universities, and government agencies. NIST works directly with industry to provide the measurement foundation for process and quality control systems, trade specifications, and voluntary standards. Physical and chemical measurement technology, standards, and reliable data are crucial to our Nation's effort to enhance productivity, introduce new technologies, and meet the competitive challenge in a range of international markets.

Fundamental Physical Measurements and Standards - performs research on the structure and behavior of atoms and molecules in isolation, in clusters, on surfaces, and in the solid state, resulting in measurement methods, standards, and data in support of the national measurement system and to assist U.S. industry to introduce competitive technology in the marketplace. This program maintains, develops, and transfers national standards for time and frequency; develops well-defined radiation sources as radiometric or wavelength standards to meet national measurement needs; generates, compiles, and evaluates data to address major national demands in fields such as fusion plasma diagnostics, laser development, microelectronics, and synchrotron radiation research.

Radiation Measurements and Standards - provide the Nation with measurement technology needed to understand and control the effects of infrared, optical, ultraviolet, and ionizing radiation on matter. Research in electron physics, photon physics, and ionizing radiation science leads to standards, data, and measurement services for application and technology transfer in many areas including: the health-care industry; industrial radiation processing; the lighting, photographic, and xerographic industries; radiation chemistry and biology; occupational safety; national defense; solar and space measurements; advanced telecommunications; and pollution control.

Analytical Chemical Measurements and Standards - develop new and improved measurement methods and standards for high accuracy chemical analyses and serve as the National Reference Laboratory for assuring the reliability of analytical measurements and to provide for advances in chemical measurement science to address the new high technology needs. The measurement methods and reference materials from this program provide the basis for uniform measurements in the chemical, clinical services, instrument manufacturing, metals-producing and emerging high technology materials industries as well as many Federal programs related to environmental pollution, toxic substances, and health services. Research adding to the fundamental knowledge for chemical separation science provides an important part of the foundation for the development of new intrinsically accurate and precise measurement methods and reliable standards.

Chemical Properties and Processes - provides underlying scientific basis and engineering measurement techniques, standards, data on key properties (thermophysical, thermochemical, and kinetic), predictive methods, and calibration and measurement services. These will enable the chemical, biochemical, and related industries, academic institutions, and government to calibrate their measurements relative to national standards for equitable exchange of goods in commerce, to develop more reliable process control techniques, and to design real-time on-line measurement methods and more efficient processes and plants. These services support the U.S. industrial trend toward production of higher value-added specialty chemicals, processing of biochemicals, production of chemicals and components for the microelectronics industry, and use of new feedstocks derived from solids and the heavier fractions of crude oils. This research program also develops, maintains, and improves national measurement standards for temperature, pressure, flow, volume, liquid density, and humidity.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
INCREASES FOR FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increases/Decreases	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Fundamental physical measurements and standards	Pos./BA	200	$20,528	209	$21,528	9	$1,000
	FTE/Obl.	212	20,367	218	21,192	6	825
Atomic scale electronics	Pos./BA			9	1,000	9	1,000
	FTE/Obl.			6	825	6	825

Atomic Scale Electronics - This increase will enable NIST to expand and focus a concentrated, long-term, interdisciplinary effort in measurement science to support industry in the development of future generations of atomic scale electronic and optical devices.

The Competitive Issue

Over the past decades, the U.S. and Japan have been competing world-wide for markets for high technology products. As the Japanese are gaining in market share, they are also greatly increasing their investment in basic research. MITI's "Vision for the 1980's" stressed that Japan's continued success depends critically on such investment. Their new Exploratory Research for Advanced Technology Office (ERATO) sponsors long-term studies in fields that would be too expensive or too risky for private industry. They recognize that, although science and technology are becoming increasingly interactive, science is still the parent and technology the child.

In a number of high technology fields, particularly those using electronic or optical devices, industry is evolving toward ultra-small, atomic scale systems. These atomic scale systems will be composed of active elements containing only one or a few atoms. The industrial application of this technology requires a fundamental measurement capability that is virtually non-existent. This initiative will fund a long term effort to develop the required capability through innovative measurement science. As in the past, advances in measurement science can be expected to lead to fundamental discoveries that keep existing industries competitive and form the basis for entirely new industries. Continuing scientific leadership is important as the U.S. electronics industry alone has present sales of more than $248 billion.

The Technology

Today, a general trend in electronics and opto-electronics is toward smaller and smaller dimensions for the individual components. The motive for shrinking the components of integrated circuits, for example, is to minimize the cost and time needed to perform each circuit function and thus to provide vastly greater affordable power to process and communicate information. Technical improvements within this decade are expected to increase the number of components per chip to a billion -- so-called "nanotechnology," where dimensions and tolerances are reduced by a factor of ten to about one ten millionth of a meter, about one thousand times the size of an atom. At this point, the electronics industry will reach fundamental physical limits to its present technology. To go beyond these limits, a new generation of measurement technology is needed, along with a new understanding of the behavior of ultra-small electro-optical systems. This development of a "picotechnology," where the critical dimensions are sub-atomic, will support industry's development of vastly more efficient, atomic scale electronic and optical devices that depend on the behavior of individual atoms and molecules.

Role of NIST

NIST is in a unique position to mount a program of long-term generic research to provide the science base for atomic scale devices. The excellence of one particular program to be expanded as part of this initiative was specifically acknowledged in the citation for the 1989 Nobel Prize in Physics. We have had, and continue to have, an outstanding internationally recognized research capability in the broad field of atomic, molecular, optical, and surface science. These disciplines are closely related to the NIST mission and are integrated into programs of microstructure imaging, high precision laser metrology, and fundamental quantum phenomena. In addition, NIST has major calibration and measurement support programs that can provide the necessary linkage of this new picotechnology to the semiconductor, electro-optical, telecommunication, computer, and magnetic storage industries likely to be affected by the results of this initiative.

The measurement science proposed here is the kind of basic research that industry, with its emphasis on proprietary results and short-term returns, is reluctant to support. Even the big high-tech companies that built their reputations on fundamental technological innovations are feeling pressure to soft-pedal expensive long-range projects with uncertain futures. Ian Ross, President of AT&T Bell Laboratories has emphasized that the short-term focus "is a very real problem with innovation in this country."

NIST Response to Industry Needs

There are no sudden answers. Atomic scale devices cannot be arrived at by the classical approach of starting with the bulk material and incrementally reducing the size of the components. We must do an about face and begin by studying the behavior of the atoms and molecules themselves -- how they grow on surfaces, how they aggregate into clusters, how clusters aggregate into microstructures, and finally how atoms behave in the solid. As the inventor of the transistor, William Shockley, wrote in 1950, "The modus operandi of research programs like that associated with the invention of the transistor is to seek primarily for a fundamental understanding of the phenomena being investigated..."

We are therefore proposing a program of long-term generic research to provide the science base for atomic scale devices. The new quantum semiconductor devices, where tunneling electrons resonate in quantum "wells," provide useful new functions. It appears that, with future exploitation of quantum "wires" and "dots," it might be possible to achieve a ten-thousand fold reduction in cost per function. Even with these advances, other approaches undoubtedly exist and remain to be identified. The ultimate realization of these improved future devices could have profound implications for supercomputing, magnetic storage technology, optical storage data systems, and optical communication devices and networks.

In one approach, we will use a state-of-the-art scanning tunneling microscope to study the growth of metal atoms on semiconductor surfaces. We have recently observed, for example, that clusters of 13 iron atoms grown on gallium arsenide are insulating, while larger clusters of more than 35 atoms begin to show metallic behavior. Yet we have little understanding of just how their properties change from those of atoms to solids in this unexplored range of sizes. We are proposing to develop a new type of scanning tunneling microscope to show the magnetic structure with nanometer resolution. The capability of measuring both physical and magnetic properties with atomic resolution will be unique in the world and will provide the ability to "atomically engineer" structures and devices. In another application of the scanning tunneling microscope, we propose to develop the ability to map electrical potential at each location on a surface. This would allow us to observe effects of atomic scale defects on current flow and to determine the importance of quantum effects. Such measurement technology is crucial to the conception, design and production of future electronic and optical devices.

The fabrication of any such devices will require the measurement and control of atomic and molecular processes. Scientists in NIST have shown the unique potential of powerful new x-ray methods for investigating these processes in reactive plasmas, a key step towards understanding atomic scale device fabrication. In one such method, interference between surface reflection and lattice diffraction produces guided wave fields that permit depth profiling at buried interfaces. In another method, fluorescence polarimetry is used to reveal the orientation of the molecules. Full development of such diagnostic techniques, coupled with chemical physics research using appropriate databases, should lead to an understanding that could ultimately provide the basis for process improvement.

NIST Output

- Undertake a basic research program aimed at understanding atomic level interactions critical to development of future electro-optical devices.
- Develop new tests of fundamental laws of physics that determine the behavior of quantum devices.
- Provide validated and accessible databases not only for technologically relevant atoms and molecular systems but also for those whose special characteristics are particularly challenging to theory.
- Develop new measurement methods at the quantum limits of precision, with applications for magnetic recording, electro-optical devices, and optical computing.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Atomic Scale Electronics

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$236	$236
11.9	Total personnel compensation	236	236
12.1	Civilian personnel benefits	64	64
21	Travel and transportation of persons	31	31
22	Transportation of things	17	17
23.3	Communications, utilities and miscellaneous charges	69	69
24	Printing and reproduction	4	4
25	Other services	259	259
26	Supplies and materials	84	84
31	Equipment	61	61
99	Direct obligations	825	825
	Transfer to the Working Capital Fund		175
	Total increase requested		1,000

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Atomic Scale Electronics

Title	Grade	Number	Annual Salary	Total Salaries
Chemist	15	1	$59,216	$59,216
Physicist	15	1	59,216	59,216
Physicist	14	2	50,341	100,682
Technicians	11	3	29,891	89,673
Administrative/technical support	9	1	24,704	24,704
Secretary	6	1	19,386	19,386
Total		9		352,877
Less lapse 33%		(3)		(116,877)
Total full-time permanent		6		236,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	6
Authorized Positions:	
Full-time permanent	9

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Analytical chemical measurements and standards	Pos./BA	50	$4,459	90	$8,789	40	$4,330
	FTE/Obl.	56	4,459	78	6,369	22	1,910
Chemical measurements and standards	Pos./BA			40	4,330	40	4,330
	FTE/Obl.			22	1,910	22	1,910

Chemical Measurements and Standards - This increase will enable NIST to support a program of measurement research and services vital to improving process control and quality assurance in chemical-measurement-intensive industries.

The Competitive Issue

"For American industry the message is simple, get better or get beat," (Business Week June 8, 1987).

Quality and overall competitiveness are becoming the determining factors of long-term economic growth and international economic survival of the United States. As shown by recent surveys, the number one concern of corporate America is quality. In a recent American Society for Quality Control study, 40 percent of the companies surveyed now have specific budget items for quality improvement. Recognition of need for improvement is now real, but results far from match the needs. The "best-in-class" defect rate among Malcolm Baldrige National Quality Award winners is approximately three per million actions, in the same range as much of Japanese industry. Defect rates across U.S. industry, however, average 6,000 per million actions, 2,000 times worse than leading U.S. firms and most Japanese firms. If they are to compete with the Japanese, most U.S. firms will require massive efforts to catch up with aggregate Japanese quality levels, while the Japanese steadily continue to improve.

Consider the variety of industries exploiting chemical compositional measurement technology, one of the most economically significant, rapidly growing, and complex technologies in the U.S. economy. This technology is used in virtually all industrial sectors and private/public testing laboratories, including materials (e.g., metals, alloys, ceramics), food, glass, chemical, paper, and aerospace industries as well as health care and state, local, and Federal laboratories. The approximately 250 million measurements per day are experiencing a 15-20 percent real growth rate per year. These measurements represent a real cost to industry of $50 billion annually, and affect products and services that account for two thirds of the U.S. GNP. Even small improvements in chemical measurement technology could have an enormous impact, raising quality levels and competitiveness across a very broad spectrum of American industry.

The challenge is not only from Japan. Many industries will be affected as the European community moves toward a comprehensive policy in the fields of product certification and testing with a view to the achievement of a single market by 1992. This will lead to mutual recognition of standards and test results among member states that will present another serious hurdle for U.S. exports. Product certification, testing, and standards are all heavily dependent on measurement science and technology.

The Technology

The growing response of U.S. industry to this competitive challenge includes a sharp focus on quality in production, a tightening of designs to meet performance standards, and automation of process controls. Improved design creates a heavy demand for measurements, and for reference data and materials. U.S. industry is employing many new technologies to great advantage in dealing with these problems, but there are still many barriers that must be removed before the technologies can be fully exploited.

High-technology industries are particularly dependent on quantitative chemical measurements as more stringent requirements must be met for raw materials, finished products, and wastes. The health-care industry, for example, is increasingly dependent on chemical testing. Markets are expanding for new diagnostic tests, associated instruments, and supplies for mass screening of patients. World markets for instruments and chemical test supplies are expected to undergo sustained, significant growth for decades to come.

The Role of NIST in the Technology

The diversity and nature of the required analytical chemical measurement technology, and the scope and sizes of the industrial and public sectors involved are such that no single commercial organization has an economic incentive to produce, maintain, and interrelate the analytical measurement methods, reference data and reference materials, and to support the necessary standards infrastructure. Moreover, reference materials such as will be produced under this initiative, which cross industry lines and buyer-seller interactions, demand an accuracy foundation verified by a "third party" having no proprietary interest and should be subject to full scientific scrutiny and review.

Measurement solutions needed in chemical-measurement-intensive industries require not only NIST's impartial position relative to sellers and buyers, and its official imprimatur as the nation's lead agency for measurement, but also its special measurement expertise in this area. These three characteristics are essential to ensure rapid adoption of newly-developed measurement technology by the industry, by its domestic and international customers, and in particular by international standards organizations whose decisions affect the entry of U.S. products into foreign markets.

These tasks are included in NIST's mission, and support specific DoC subgoals to (1) increase U.S. exports of goods and services, (2) increase the acceptance of international technical standards, and (3) promote the development and application of science and technology in U.S. industries.

NIST Response to Industry Needs

In areas of emerging and established, but rapidly changing, technologies, the measurement costs incurred are three to five times higher than in traditional technology. There is also a greater demand for accuracy and sophistication, often challenging state-of-the-art capabilities. The programmatic thrust of this initiative will enable NIST to extend the measurement base that industry uses to assure the quality of its own measurements and to advance fundamental measurement science in emerging technology areas where current and projected knowledge is inadequate to address industry's needs.

In the electronics industry, for example, it is known through laboratory research that heavy metals such as lead and thorium, at levels less than one part per billion in bulk materials, can ruin the performance of electronic devices (one part per billion is less volume than would be occupied by a sugar cube in an Olympic-size pool). When industry is able to perform these chemical analyses routinely on bulk materials and also perform locationally specific analysis at these levels, product reliability and production success rates should improve dramatically. One of the projects NIST plans in chemical measurement science is to develop a complementary ability to perform quantitative analytical chemistry with 10-100 nm spatial resolution ("nm" is short for nanometer, 60 nm is about 1/1000th the diameter of a human hair). Such high resolution is critical to material integrity in all high-technology industries.

Leading American analytical instrument manufacturers are working with NIST to develop automated chemical processing equipment. Advanced analytical instruments are extremely dependent on large databases of carefully evaluated data, which allow automated comparisons of samples with standard, laboratory-verified standards. In the case of automated analytical instrumentation, databases will directly support manufacturers of instruments which perform chemical analysis and/or determine the physical structure of materials. The databases will be designed to be incorporated in the computers that are part of the instrument.

Economic Impact

NIST efforts will lead to improved quality through elimination of redundant measurements; timely technology transfer; improved productivity through continuous in-process measurements; improved traceability to national and international measurement standards; and the promotion and support of voluntary industry engineering standards. With measurements of all kinds in the U.S. costing more than $200 billion annually, benefits from measurement-related technologies will be realized by all industry. Examples of industries impacted include materials and food processing, waste management, medical diagnostic technologies, and instrumentation.

Manufactured goods represent approximately 20 percent of the U.S. GNP. It is estimated that 10-20 percent of domestic sales in this sector are for "off-spec" products -- manufactured goods sold at a loss or reprocessed to meet specifications. This estimate may be conservative since the total impact also includes measurements that qualify or reject feedstock and process streams. Testing can account for an almost inconceivable 80-90 percent of the unit production cost in some industries. In this case, a small improvement in measurement technique could result in dramatic cost savings.

In the broad spectrum of industries in which chemical composition is already tied to product performance, it has been estimated that as many as 30 percent of the samples must be retested. If extended to the whole economy, the cost of repeat analyses alone would be nearly 0.5 percent of the GNP, or about $30 billion in 1989. Small reductions in the cost of testing could have a substantial financial impact leveraged across a wide range of industries. Just reducing the necessity of repeat analyses by 10 percent could save American industry as much as $3 billion annually.

NIST Output

- Develop gas chromatography using supercritical fluids, extending the range of these separations to high molecular weight species such as vitamins.
- Develop and evaluate prototypes of liquids that can be immobilized on solid cellulose discs which may lead to faster and efficient methods for element specific separations and preconcentrations in industrial processes such as filtration and organic chemical production.
- Refine the theoretical and experimental basis for the manipulation of ions to improve mass spectrometric methods for making analytical measurements on elements and molecules.
- Develop standard, multidimensional, reference databases to check methods for optimizing information extraction from chemical measurements.
- Apply chemically rational mathematical methods to analytical measurement applications to provide automated, accurate analyses and expert systems used by laboratories and incorporated by U.S. instrument industry.
- Develop measurement methods for accurate elemental and molecular compositional maps for small particles and the interactions of chemicals with industrial and biological materials.
- Develop a versatile, test robotic system to improve precision, accuracy, and sample throughput in chemical analyses, first for SRM analyses and then for industrial applications.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Chemical Measurements and Standards

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$768	$768
11.9	Total personnel compensation	768	768
12.1	Civilian personnel benefits	206	206
21	Travel and transportation of persons	47	47
22	Transportation of things	48	48
23.3	Communications, utilities and miscellaneous charges	189	189
24	Printing and reproduction	28	28
25	Other services	443	443
26	Supplies and materials	149	149
31	Equipment	32	32
99	Direct obligations	1,910	1,910
	Transfer to the Working Capital Fund		2,420
	Total increase requested		4,330

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Chemical Measurements and Standards

Title	Grade	Number	Annual Salary	Total Salaries
Research chemist	15	5	59,216	$296,080
Electronics engineer	14	1	50,341	50,341
Research chemist	14	3	50,341	151,023
Research physicist	14	1	50,341	50,341
Computer specialist	13	1	42,601	42,601
Electronics engineer	13	1	42,601	42,601
Research chemist	13	1	42,601	42,601
Computer specialist	13	2	42,601	85,202
Mathematician	12	1	35,825	35,825
Research chemist	12	1	35,825	35,825
Electronics engineer	12	5	35,825	179,125
Research chemist	11	1	34,363	34,363
Administrative/technical support	11	4	29,891	119,564
Technician	9	5	24,704	123,520
Secretary	7	5	20,195	100,975
Technician	6	1	19,386	19,386
Technician	5	3	16,305	48,915
Total		40		1,415,687
Less lapse.......46%		(18)		(647,687)
Total full-time permanent		22		768,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	22
Authorized Positions:	
Full-time permanent	40

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Chemical properties and processes	Pos./BA	129	$12,058	158	$14,358	29	$2,300
	FTE/Obl.	137	12,058	159	14,143	22	2,085
Bioprocess engineering	Pos./BA			29	2,300	29	2,300
	FTE/Obl.			22	2,085	22	2,085

Bioprocess Engineering - This increase will enable NIST to develop measurement and data tools needed by U.S. industry to accelerate commercialization of bioproducts and thus ensure a significant share of the world biochemical market.

The Competitive Issue

The United States currently leads the world in fundamental biochemical research and innovation in the laboratory, but is behind world competition in the capability to extend this technology to the marketplace. Recent reports have stressed that the current U.S. competitive advantage in modern biotechnology, which represents an increasingly larger fraction of the $200 billion U.S. chemical industry and its positive balance of trade, will be difficult to maintain through the next decade without significant developments in bioprocess engineering, i.e., conversion of laboratory science into practical industrial manufacturing (processing) technology. Bioprocessing technology now stands at a highly competitive state of readiness in Japan and Western Europe. Foreign government investment in biochemical engineering research, with intent to commercialize, far exceeds that of the United States. Japan has recently targeted biotechnology as a critical industry and mounted an intensive campaign to transfer discoveries in biochemical research from laboratories to marketable products. World biochemical markets are likely to be controlled by first-entry firms of those countries which possess resources in both laboratory science and engineering research. To achieve first or early entry, a U.S. bioprocess engineering capability must be established that will enable design, scale-up, and control of processes to produce high quality bioproducts economically.

The Technology

Bioprocess engineering combines biology, chemistry, and engineering to focus on manufacturing aspects of producing high value-added chemicals and related biological products via biochemical means. In bioprocess engineering, researchers apply engineering principles to the problems of scale-up to convert laboratory-scale processes into practical industrial manufacturing (processing) technology for the production of new biological products, including genetically engineered organisms. Measurement methods used in the evaluation of a laboratory-scale process must be compatible with the monitoring measurements required for an industrial-scale process or the development of the latter will be slowed. The complexity of numerous microorganisms, including plant and animal cells, greatly complicates this problem.

Industry currently relies on the use of pilot plants to optimize processes for production of biochemical production, with significant sacrifice in cost and time. Rapid conversion of processes from the laboratory to the plant will require the development of measurement methods, design data, and elemental process simulacion models. A U.S. bioprocess engineering knowledge base must be established to enable rapid design, scale-up, and control of biomanufacturing processes.

The Role of NIST in the Technology

NIST can contribute analytical and manufacturing measurement technology, protein characterization methodology, and engineering design data in the formative stages of this industry. NIST can provide the interdisciplinary approach needed to enable industry to commercialize and produce biochemical products economically and with appropriate quality control. The proposed NIST research will focus on the improved design and control of bioprocessing, including bioreactors and separators, to optimize product yield and quality. Emphasis will be placed on demonstration of scaleability--from the laboratory to the plant--of measurement methods, design data, and elemental process simulation models, to expedite commercialization.

NIST Response to Industry Needs

The NIST "Bioprocess Technology" will draw upon protein engineering, biochemistry, molecular biology, analytical biochemistry, and biochemical engineering to provide fundamental measurements, data, and procedures for the characterization of biomolecules, and for the design of processes and equipment to produce pharmaceuticals, bulk and specialty chemicals, and fuels via biochemical pathways. NIST worked with industry to develop this initiative, and collaboration with industry, particularly small businesses, will be an important part of conducting this program. This collaboration will be achieved through the NIST/University of Maryland Center for Advanced Research in Biotechnology where working with industry is a major focus; through membership and active participation in industry/university consortia such as the Biotechnology Process Engineering Center at MIT; and through the NIST Research Associate program with individual firms.

The technical areas of proposed NIST research are: (1) monitoring and control of bioreactors; (2) commercial separation and purification of biological products, (3) measurement of thermophysical properties (e.g., phase equilibria, viscosity, and diffusion coefficients), of biological substances needed for design; and (4) identifying and characterizing the relationship between molecular structure, conformation, and chemical process behavior of biomolecules to increase the efficiency of protein engineering in developing commercial products.

This research will (1) enable U.S. industry to accelerate commercialization of bioproducts and promote early penetration of world markets with competitively priced products, (2) stimulate growth of new technology and introduce new processes and products into the marketplace, thereby, increasing competitive positions of the rapidly-growing U.S. biochemical industry.

Economic Impact

Biotechnology is receiving considerable attention in this country as well as in Europe and Asia. Dramatic advances during recent years have provided the opportunity to exploit new processes that can contribute to diverse sectors of the economy (e.g., agriculture, pharmaceuticals, specialty chemicals and health care products). Examples of biochemical products include pharmaceuticals (i.e., AIDS and hepatitis vaccines, insulin, blood anti-coagulants, cancer treatment drugs, and growth hormones), food processing agents/additives (i.e., vitamins, preservatives, dairy cultures) animal growth hormones and vaccines, insecticides, herbicides, plant disease and growth regulators, and bulk chemicals (i.e., alcohol based chemicals and fuels from biomass, forest, waste, and farm products). Projections of the worldwide biochemical market by the year 2000 are in the range of $40-100 billion.

NIST Output

- Develop a technique to measure the electrophoretic mobility and surface charge density of proteins as a function of solution pH and ionic strength. This technique will provide basic data on the relationship between protein charge, stability, phase affinity, and aggregative characteristics in biochemical reactors and separation systems.

- Develop improved methods for measuring and characterizing fundamental transport processes in bioreactions and bioseparations, including enzyme systems, cell bioreactors, extraction, membranes, and combined methods. Provide engineering models for these processes which are based on thermodynamic and kinetic fundamentals and including databases of surface charge, diffusivity, and solubility of biological macromolecules.

- Establish capability to measure selected thermophysical properties of biomolecules in solution at moderate to supercritical pressures. These properties data are basic to the development and optimization of extraction separation processes for the bioprocessing and related industries.

- Develop improved methods for designing and effecting amino acid substitutions in proteins and enzymes. These techniques will enable evaluation of the effects of small changes in amino acid sequence on protein structure, function and energetics, thereby providing the means for optimizing protein design.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Bioprocess Engineering

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$767	$767
11.9	Total personnel compensation	767	767
12.1	Civilian personnel benefits	207	207
21	Travel and transportation of persons	83	83
22	Transportation of things	82	82
23.3	Communications, utilities and miscellaneous charges	173	173
24	Printing and reproduction	30	30
25	Other services	369	369
26	Supplies and materials	242	242
31	Equipment	132	132
99	Direct obligations	2,085	2,085
	Transfer to the Working Capital Fund		215
	Total increase requested		2,300

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards
Program Change: Bioprocess Engineering

Title	Grade	Number	Annual Salary	Total Salaries
Biochemical engineer	15	1	$59,216	$59,216
Physical chemist	15	1	59,216	59,216
Biochemist	14	1	50,341	50,341
Chemist	14	1	50,341	50,341
Biochemical engineer	13	2	42,601	85,202
Biochemist	13	4	42,601	170,404
Biophysicist	13	1	42,601	42,601
Chemist	12	2	35,825	71,650
Electronic engineer	12	1	38,637	38,637
Chemical engineer	11	1	34,363	34,363
Administrative assistant	9	1	24,704	24,704
Administrative/technical support	9	4	24,704	98,816
Biochemical engineer	9	1	31,490	31,490
Chemical engineer	9	3	31,490	94,470
Technician	9	3	24,704	74,112
Secretary	6	1	19,386	19,386
Secretary	5	1	17,936	17,936
Total		29		1,022,885
Less lapse.......25%		(7)		(255,885)
Total full-time permanent		22		767,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	22
Authorized Positions:	
Full-time permanent	29

Measurement Research and Standards
Reimbursable Program by Source of Support
(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$6,226	$6,785	$6,020
Army	3,590	2,474	2,623
Navy	3,743	4,451	4,718
Other	691	630	668
Subtotal, Department of Defense	14,250	14,340	14,029
Department of Commerce	378	370	392
Department of Energy	4,163	5,328	5,647
Environmental Protection Agency	1,300	1,356	1,437
Department of Health and Human Services	654	821	869
Department of Justice	17	91	96
National Science Foundation	182	103	109
National Aeronautics and Space Administration	4,173	4,962	5,259
Nuclear Regulatory Commission	463	754	729
Department of Treasury	95	90	95
Other	112	164	173
Total, Other Agency	25,787	28,379	28,835
Calibrations and Tests	1,903	2,032	2,156
Standard Reference Materials (SRM)	2,318	2,435	2,585
Technical and Advisory Services	2,505	2,825	2,994
WCF Investment	0	239	2,971
Total, Reimbursable Program	32,513	35,910	39,541

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Materials characterization	Pos./BA..	112	$10,383	111	$10,321	109	$11,647	129	$13,897	20	$2,250
	FTE/Obl..	120	10,198	119	11,629	117	11,547	131	13,376	14	1,829
Metallurgy and metals processing	Pos./BA..	53	4,654	52	4,630	51	4,835	51	4,835	0	0
	FTE/Obl..	57	4,806	56	4,795	55	4,835	55	4,835	0	0
Polymer and ceramics science	Pos./BA..	92	8,507	92	8,206	91	8,563	91	8,563	0	0
	FTE/Obl..	99	7,960	99	8,283	98	8,563	98	8,563	0	0
Total requirements	Pos./BA..	257	23,544	255	23,157	251	25,045	271	27,295	20	2,250
	FTE/Obl..	276	22,964	274	24,707	270	24,945	284	26,774	14	1,829

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering

	1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Materials characterization										
WCF transfers.......	0	0	0	$100	0	$100	0	$521	0	$421
Reimbursable FTE/Obl.......	34	3,533	34	5,009	34	5,123	34	5,123	0	0
Subtotal.......	34	3,533	34	5,109	34	5,223	34	5,644	0	421
Metallurgy and metals processing										
WCF transfers.......	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl.......	55	6,115	55	6,625	55	6,026	55	6,026	0	0
Subtotal.......	55	6,115	55	6,625	55	6,026	55	6,026	0	0
Polymer and ceramics science										
WCF transfers.......	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl.......	68	6,159	68	6,715	68	7,305	68	7,305	0	0
Subtotal.......	68	6,159	68	6,715	68	7,305	68	7,305	0	0
Total requirements										
WCF transfers.......	0	0	0	100	0	100	0	521	0	421
Reimbursable FTE/Obl.......	157	15,807	157	18,349	157	18,454	157	18,454	0	0
Total.......	157	15,807	157	18,449	157	18,554	157	18,975	0	421

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
MATERIALS SCIENCE AND ENGINEERING

Goals and Objectives

Goals:

The goal of this subactivity is to provide the Nation with measurement methods, standards and data fundamental to a more complete understanding of the processing, structure, properties, and performance of materials. This goal supports the DoC goals of (1) promoting the development and application of science and technology in U.S. industries, and (2) increasing the acceptance of international technical standards based on U.S. technology.

Objectives:

- Advance fundamental understanding of the relationships among process conditions, the internal structure of the resulting materials, and the performance of the new materials in applications such as durable manufactured goods, transportation equipment, chemical production, and information storage and transmission.
- Develop measurement techniques, data, theory, and predictive models related to advanced metallic materials, removing the roadblocks to the use of advanced materials and improving the application of these materials in magnetic applications and structural materials for engines for aircraft, ground transport, and power generation.
- Provide critical data, theory, measurement methods and predictive models for advanced ceramics, to facilitate their widespread use in emerging technological areas such as advanced engines, turbines, wear parts, and electronic and optical components.
- Provide industry with data, test methods, and models to predict performance and durability of manufactured components made with composite materials.
- Improve the uniformity of materials, reduce industry costs, and reduce uncertainty about the supplies of materials by developing the science base for lightweight materials such as polymer, metal and ceramic matrix composites that can substitute for metal alloys in applications such as aircraft and automobiles.
- Reduce the Nation's billions of dollars of losses due to limited durability of materials, by advancing theory and measurement techniques needed to reduce corrosion, and prevent fracture, especially in applications such as the disposal of nuclear waste, the control of biological degradation, and the improvement in corrosion resistance of primary metals.
- Develop advanced sensors and nondestructive evaluation techniques and standards that can be used on-line to automate and improve the efficiency of production processes, thus assuring the quality and competitiveness of traditional and advanced materials, such as polymers, advanced composites, metals and alloys, and high performance ceramics; and develop and improve nondestructive evaluation techniques and standards for monitoring critical in-service structures such as aircraft, bridges, and pipelines.

Base Program

Nowhere is the impact of new technology being felt more strongly than in industrial materials. The era of "designer" materials is at hand. The historical basis of materials (e.g., mining, refining, smelting, and heavy industrial processing) is making way for the science, processing, and automated manufacturing of high technology, high-value-added materials such as advanced ceramics, high performance polymers and polymer composites, magnetic materials, intermetallic alloys, and metals with radically altered internal structures and properties. NIST provides technical underpinnings that U.S. industry will need to succeed in the highly competitive environment that lies ahead. To compete effectively, U.S. industry must be at the forefront in ability to create new, advanced materials with improved qualities and at internationally competitive costs.

Materials Characterization - provides for the development of more accurate characterization methods for the physical, chemical, compositional, and structural features of materials. Characterization methods for laboratory use include optical, electron, and ion microscopy; nuclear magnetic resonance, x-ray and infrared spectroscopy; and the wide range of neutron measurement capabilities available at the NIST research reactor. Nondestructive characterization methods are the basis for on-line materials process control and in-service inspection for quality assurance and include acoustic emission, ultrasonics, thermal waves, eddy currents, dielectricity, and magnetics. The program also includes the measurements-based high performance polymer composites thrust which focuses on process control and the relationship between microstructure and failure mechanisms.

Metallurgy and Metals Processing - supports measurement technologies which promote the safe, efficient, and economical use of metals. Research in metallurgy deals with the evaluation of microstructure (as influenced by processing variables), and corresponding structure/processing/property relationships in metals and alloys. It is a multi-disciplinary activity involving the physics of solids, solid state chemistry, and mechanics. The metallurgical processing and performance research is concerned with improving the quality, reliability and safety of metallic materials, products, and structures.

Polymer and Ceramic Science - provides standards, data, measurement methods, and fundamental concepts needed by industry for improved processing and durability of polymeric and advanced ceramic materials and for the use of these materials in high technology applications. The program focuses on the mechanical, electrical, and optical performance of ceramics, polymers, and composites.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Materials characterization	Pos./BA	109	$11,647	129	$13,897	20	$2,250
	FTE/Obl.	117	11,547	131	13,376	14	1,829
High performance composites	Pos./BA			10	1,000	10	1,000
	FTE/Obl.			7	774	7	774

High Performance Composites - This increase provides the second increment of funding for high performance composites research. Composites are attractive substitutes for traditional engineering materials because of their high specific strength and modulus, corrosion resistance, design and manufacturing flexibility, and effectiveness in conserving critical elements.

The Competitive Issue

High performance composites are critical to the Nation's industrial strength for competing in the world's market place for high technology products, particularly in the aviation and aerospace, transportation, and electronics industries. The stringent materials requirements of many of the new emerging technologies may be expected to create ever-expanding demands for these advanced materials. Composites are already an important area of worldwide competition in which the U.S. is no longer a clear leader. Research and development are proceeding rapidly and commercialization has begun in Japan and Europe. The U.S. now has the technological lead in the application of high performance composites to defense and aerospace needs--these are markets where cost and process efficiency are secondary to absolute performance requirements. In higher volume mass markets, U.S. industries face intense competition from countries with low labor costs that can work effectively with readily-available technology and from Western Europe and Japan where advanced process technologies aimed at high volume commercial markets are now being developed.

The Technology

Efficient commercialization of composite materials is tied to increased reliability at lower unit cost. Key technical barriers that limit full exploitation of composite materials are: variability introduced during processing that leads to low production rates; and the lack of knowledge concerning failure modes, particularly as related to long term performance. Overcoming these barriers requires improved processing procedures to minimize structural defects, better methods to characterize the defects which are introduced during processing or develop during use, and increased understanding of the relationships between defects and properties, since these are critical to reliability prediction.

The Role of NIST in the Technology

The NIST program will facilitate the development and application of science and technology in U.S. industry by developing the scientific basis and measurement methods for process control, and by clarifying the relationships between microstructures and the failure mechanisms that adversely affect performance. This increase will allow the program to address the need for improved understanding of the mechanical performance and failure modes of polymer composites. Specifically, composite performance will be determined and modeled using relationships among processing conditions, constituent properties, composite properties, microstructures, and failure modes. Process control sensors and models will be developed and used as a basis for improving control of processing and the effects of processing on composite properties.

The planned program takes advantage of NIST's broad-based experience with the component materials from which composites are fabricated and our proven strength in materials characterization. This measurement-based program will lead to improvements in existing methods of defect characterization and the development of new techniques designed to monitor and control the processing steps and reduce in-process defect formation. The program also ties the defect characterization to ultimate property prediction via measurements and theoretical modeling. Polymer matrix composites will be addressed due to the immediate potential volume of commercialization and its impact on U.S. industry.

NIST Response to Industry Needs

The program plan for this increase was developed by industry representatives to a NIST workshop specifically held for this purpose. Key industry managers representing the major industry segments identified the technical barriers to increased effective use of composites by industry and suggested appropriate federal responses.

Current cooperative programs with industry (Hi-Tek Polymers, Ferro, National Center for Manufacturing Science, and Polaroid) and universities (Illinois, Virginia Polytechnic Institute, and Michigan State) will serve as models for the expanded program. More than twenty major U.S. companies have visited NIST within the past year to learn details of the existing programs. Many of these organizations have expressed interest in cooperating in composites research. The cooperative programs will serve as a mechanism to transfer NIST research results to industry and to obtain industrial and university input for the NIST programs through interactions and exchange of research scientists.

The Economic Impact

The market for advanced composite materials is currently about $2.0 billion/year. This market is expected to grow rapidly and reach $20 billion before the year 2000. Moreover, important new designs and manufacturing methods are made possibly only through the use of composite materials, and the advanced products that result have substantial competitive advantages. To maintain the high growth rates, however, the use of composites must move beyond military applications and into the commercial sector. The NIST program addresses the primary barriers to this transition, and therefore has a direct role in achieving the full potential of this technology.

NIST Output

- Determine the influence of the mechanical properties of the polymer on a composite's resistance to delamination failure when subjected to complex loading.
- Analyze and model the failure behavior of high toughness composite resins and relate it to performance in composites.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering
Program Change: High Performance Composites

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$265	$265
11.9	Total personnel compensation	265	265
12.1	Civilian personnel benefits	71	71
21	Travel and transportation of persons	26	26
22	Transportation of things	9	9
23.3	Communications, utilities, and miscellaneous charges	68	68
24	Printing and reproduction	4	4
25	Other services	261	261
26	Supplies and materials	62	62
31	Equipment	8	8
99	Direct obligations	774	774
	Transfer to the Working Capital Fund		226
	Total increase required		1,000

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering
Program Change: High Performance Composites

Title	Grade	Number	Annual Salary	Total Salaries
Materials scientist	15	1	$59,216	$59,216
Materials scientist	14	2	50,342	100,684
Chemist	14	1	50,342	50,342
Chemical engineer	13	1	42,601	42,601
Physicist	13	1	42,601	42,601
Engineering technician	13	1	42,601	42,601
Technician	11	1	29,891	29,891
Administrative/technical support	9	1	24,705	24,705
Technician	9	1	24,705	24,705
Technician	7	1	20,195	20,195
Total		10		394,940
Less lapse......33%		(3)		(129,940)
Total full-time permanent		7		265,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	7

Authorized Positions:	
Full-time permanent	10

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Materials characterization	Pos./BA	109	$11,647	129	$13,897	20	$2,250
	FTE/Obl.	117	11,547	131	13,376	14	1,829
Intelligent processing of materials	Pos./BA			10	1,250	10	1,250
	FTE/Obl.			7	1,055	7	1,055

Intelligent processing of materials - This request proposes a program to address fundamental measurement theory and automation that industry needs in order to process materials efficiently.

The Competitive Issue

Successful competition by U.S. industry in international markets will increasingly demand the development and use of intelligent processing of materials. What is needed are material processing systems which can achieve, on their own, goals set for them by humans, over a wide range of raw materials and processing conditions. An intelligent process is one carried out by such a system. In the near future, intelligent processes will begin to impact a whole range of materials processing industries, including ceramics, metals, and polymers. Intelligent processing of materials allows for better quality control and a finer definition of desired properties, both of which lead to lower reject rates and lower production costs. In a recent paper, the Dean of MIT's School of Management emphasized the importance of improvements in process technologies as a key to being competitive in the world market.

The Technology

Intelligent processing of materials can be thought of as a completely automated plant operating on raw materials to make products. These products may be materials in solid, liquid, or gaseous form. In terms of technology, such intelligent processes involve advanced sensors to measure critical material properties during processing, computer systems to compare the measurements with the desired values and to adjust the process accordingly, and control devices to perform the work. These elements are integrated into a system under an architecture of real-time control; that is, when something starts to go wrong, the process corrects itself without human intervention.

What are the technical barriers to the full utilization of intelligent processes? Industry needs a better understanding of intelligent processing as well as models and other means to represent process knowledge in forms which advanced automated systems can interpret. Industry also needs advanced non-intrusive sensors for determining the form and properties of a material during the production process. These sensors will be used by an intelligent control system to guide the real-time changes in the processing conditions required to meet specifications. Better measurement technology and standards are needed to evaluate the various parameters involved in the processing procedure.

The Role of NIST in the Technology

Based on its long experience in automated manufacturing, materials science and processing, and computer technologies, as well as its many close collaborations with U.S. industry, NIST is uniquely qualified to carry out a program in intelligent processing of materials. NIST's role in the development of this technology would be twofold. This proposed budget increase will enable NIST to work with industry to (a) establish a generic technology base for a number of material processes which are particularly amenable to the adoption of intelligent process technology, and (b) develop prototype in-process sensors and measurement capabilities to enable the economic production and worldwide marketing of materials by our domestic industry.

NIST Response to Industry Needs

Under this initiative, NIST will conduct collaborative, interdisciplinary research on systems involving in-process sensors, the processing of sensory data, the computer representation of product-and-process knowledge, and the intelligent control involved in the production of materials. This generic work will complement industry work on specific process control systems. In the conduct of this program, NIST will collaborate with U.S. industry through: trade associations such as the American Iron and Steel Institute; development-oriented consortia such as the Consortium on Powder Metallurgical Processes; and the NIST Research Associate cooperative programs with individual firms.

A range of disciplines and supporting technologies including information technology, nondestructive evaluation, and materials science will be applied to develop:

- o approaches to the integration of sensory data, process models, and physical action in automatic control as a basis for a formal theory of intelligent processes.
- o procedures for using data from advanced sensors to guide changes in process variables in order to optimize the properties of materials produced.

The proposed NIST program will develop the generic technology base necessary to measure the performance of and establish standards for future generations of intelligent materials processes. This generic technology will involve creating a prototype version of a knowledge database demonstrating how that information can be used to help control a process by establishing a set of rules and constraints which link data elements describing the product with those describing the process. This generic technology will also include development of the capability to control materials processing automatically to achieve products having reproducible, controlled, and tailored functional properties.

To support the market-transaction requirements for rapid commercialization and market penetration of the technology, the proposed NIST program will develop a range of standards, measurement methods and laboratory-based testing capabilities. NIST will establish the capability to evaluate the performance of intelligent materials processing applications in a laboratory setting. This will allow the test and verification of a formal theory of intelligent processes and validation of the open system architecture based upon it.

The Economic Impact

The proposed advances in generic technology and associated standards will permit a more rapid development of materials processing in the U.S., including participation--both as vendors and users--of small, innovative companies. This work has the potential to generate enormous cost savings. This automated technology would make the United States competitive with countries having lower labor costs as well as in markets in which human skills are not sufficient to accurately carry out the manufacturing process. Overall, the resulting advanced product offerings and higher productivity of U.S. firms will translate into more favorable competitive positions in global markets.

NIST is submitting a companion initiative on Intelligent Machines. There are areas of common research in intelligent automated control of manufacturing processes that relate to both materials and parts. Close coordination in planning and implementation of these research programs has occurred, and will continue.

NIST Output

With funding requested for fiscal year 1991, NIST will initiate programs in the following three major areas:

- Determining effects of in-process environments and limitations on specific in-situ sensors.
- Conducting experiments to confirm existing process models for materials processing.
- Designing software for expert control systems for materials production.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering
Program Change: Intelligent Processing of Materials

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$294	$294
11.9	Total personnel compensation	294	294
12.1	Civilian personnel benefits	79	79
21	Travel and transportation of persons	31	31
22	Transportation of things	20	20
23.3	Communications, utilities and miscellaneous charges	91	91
24	Printing and reproduction	5	5
25	Other services	436	436
26	Supplies and materials	88	88
31	Equipment	11	11
99	Direct obligations	1,055	1,055
	Transfer to the Working Capital Fund		195
	Total increase requested		1,250

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering
Program Change: Intelligent Processing of Materials

Title	Grade	Number	Annual Salary	Total Salaries
Materials process engineer	15	1	$59,216	$59,216
Metallurgist	15	1	59,216	59,216
Physicist	14	1	50,341	50,341
Materials scientist	14	1	50,341	50,341
Mechanical engineer	13	1	42,601	42,601
Metallurgist	13	1	42,601	42,601
Materials scientist	13	1	42,601	42,601
Administrative/technical support	9	1	24,704	24,704
Physical science technician	7	2	20,195	40,390
Total		10		412,011
Less lapse.......30%		(3)		(118,011)
Total full-time permanent		7		294,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	7
Authorized Positions:	
Full-time permanent	10

Materials Science and Engineering
Reimbursable Program by Source of Support

(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$664	$888	$720
Army	1,387	1,741	1,710
Navy	1,635	1,832	1,752
Other	2,455	2,758	2,791
Subtotal, Department of Defense	6,141	7,219	6,973
Department of Justice	55	55	58
Department of Energy	2,173	2,683	2,864
General Services Administration	117	123	130
Department of Health and Human Services	843	755	800
National Aeronautics and Space Administration	605	487	463
National Science Foundation	232	787	826
Nuclear Regulatory Commission	607	0	0
Department of Transportation	329	417	449
Department of Treasury	444	583	618
Other	1,894	2,398	2,452
Total, Other Agency	13,440	15,507	15,633
Standard Reference Materials (SRM)	377	552	369
Technical and Advisory Services	1,990	2,290	2,452
WCF Investment	0	100	521
Total, Reimbursable Program	15,807	18,449	18,975

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards

		1989 Actual		1990 Currently Available			1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount		Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical measurements	Pos./BA..	195	$16,104	194	$16,197		192	$16,943	300	$28,243	108	$11,300
	FTE/Obl..	208	16,867	207	16,487		204	16,843	248	22,743	44	5,900
Mathematical sciences	Pos./BA..	64	5,547	63	5,599		62	5,347	62	5,847	0	0
	FTE/Obl..	69	5,455	68	5,853		67	5,847	67	5,347	0	0
Manufacturing research and standards	Pos./BA..	78	6,236	77	6,233		75	6,786	124	11,786	49	5,000
	FTE/Obl..	84	6,461	83	6,369		81	6,785	115	11,006	34	4,220
Fire and building research	Pos./BA..	104	9,453	104	11,271	1/	101	9,821	95	9,321	(6)	(500)
	FTE/Obl..	111	9,448	111	11,427	1/	108	9,821	102	9,321	(6)	(500)
Total requirements	Pos./BA..	441	37,340	438	39,300		430	39,397	581	55,197	151	15,800
	FTE/Obl..	472	38,231	469	40,136		460	39,297	532	48,917	72	9,620

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

1/ Includes one-time transfer of $2M for earthquake investigation.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards

		1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical measurements	WCF transfers.......	0	0	0	$200	0	$100	0	$5,500	0	$5,400
	Reimbursable FTE/Obl.......	198	$15,524	198	16,381	198	17,197	198	17,197	0	0
	Subtotal.......	198	15,524	198	16,581	198	17,297	198	22,697	0	5,400
Mathematical sciences	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	18	1,325	18	1,404	18	1,489	18	1,489	0	0
	Subtotal.......	18	1,325	18	1,404	18	1,489	18	1,489	0	0
Manufacturing research and standards	WCF transfers.......	0	0	0	0	0	0	0	780	0	780
	Reimbursable FTE/Obl.......	205	16,835	205	17,846	205	18,915	205	18,915	0	0
	Subtotal.......	205	16,835	205	17,846	205	18,915	205	19,695	0	780
Fire and building research	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	130	9,902	130	11,381	130	11,280	130	11,280	0	0
	Subtotal.......	130	9,902	130	11,381	130	11,280	130	11,280	0	0

	1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Technical reimbursable services										
WCF transfers........	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl........	17	1,621	17	1,717	17	1,818	17	1,818	0	0
Subtotal........	17	1,621	17	1,717	17	1,818	17	1,818	0	0
Total requirements										
WCF transfers.........	0	0	0	200	0	100	0	6,280	0	6,180
Reimbursable FTE/Obl........	568	45,207	568	48,729	568	50,699	568	50,699	0	0
Total..........	568	45,207	568	48,929	568	50,799	568	56,979	0	6,180

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
ENGINEERING MEASUREMENTS AND STANDARDS

Goals and Objectives

Goals:

The goal of this subactivity is to promote the Nation's domestic commerce and international trade, economic growth, and technological advancement by providing measurement and standards-related services and physical property data to the Nation's technological community. This NIST goal contributes to the DoC goals of (1) promoting the development and application of science and technology in U.S. industries; (2) increasing the acceptance of international technical standards based on U.S. technology; and (3) making Departmental laboratories available for proprietary research.

Objectives:

o Develop electronic measurement technologies with increased emphasis on optoelectronic components for optical fiber communications systems; improve measurements for key electronic materials, device properties, and manufacturing processes for semiconductor and superconductor integrated circuits and power applications; and develop new measurement methods and supporting electrical standards for electronic measurement equipment, electrical power systems, electromagnetic interference, magnetic systems, and microwave equipment including associated antennas.
o Develop measurement capability to support emergence of a competitive U.S. industry exploiting newly discovered high temperature superconductors. Focus will be on measurements and generic data needed for understanding and characterizing superconducting materials, and for developing, controlling, and characterizing fabrication processes for integrated-circuit devices, wires, and other components, with commercial or measurement-standard potential.
o Expand the successful program for interface standards and more efficient quality control techniques for automated manufacturing to a wide spectrum of mechanical and electronic applications, including applications to the measurement demands of ultra-high precision engineering.
o Develop improved measurement methods for diagnostics and quality assurance in construction; remove technical barriers to computer-integration of the design, construction, and operation of buildings and large civil engineering projects including concepts and principles for expert systems, performance prediction methods, interface standards, and test methods; and reduce losses from earthquakes and structural failures through research and technical support for development of improved design and construction practices.
o Develop user-friendly computer-based systems for fire-hazard and toxicity assessments which involve fundamental understanding of fire, including measurement methods, data, and computer models of fire and smoke transport and other complex processes involving fluid mechanics and combustion, especially where improved generic technologies are needed.
o Develop improved statistical and mathematical modeling and scientific computing methods to ensure the accuracy of NIST technical data and measurement services provided in response to national needs and to improve quality and productivity in U.S. industry.

Base Program

Availability of low-cost, high-speed computing, including supercomputers, more concern for quality assurance by industry, changes in the engineering profession itself, and advances in many specific technological areas deeply affect NIST; they also challenge NIST to create new engineering measurement and standards services which industry needs for improved process control and product quality, marketplace equity, and effective conduct and utilization of research and development. At the same time, many existing services must be maintained and upgraded.

Electronics and Electrical Measurements - provide generic measurement methods, measurement services, and national reference standards to support research, development, manufacture, equitable marketplace transactions, and entry into international markets for the Nation's high-technology electronic components, systems, and related materials. In particular, this program provides support for basic electrical measurements, including power and energy, and for electronic technologies based on semiconductors, superconductors, normal conductors, dielectrics, magnetics, and optoelectronics, especially those optoelectronics used in fiber optic communications systems. Affected are $248 billion per year of new electronic products for computing, microwave communications and radar, electrical power systems, optical fiber communications, test and measurement, navigation, defense, and manufacturing.

Mathematical Sciences - ensure that the best and most appropriate techniques in statistics, mathematical modeling, numerical analysis, and scientific computing are made available to and used by the NIST technical staff. The program helps certify the accuracy and integrity of NIST technical data and measurement systems and helps validate NIST scientific experiments and refinements of new technology.

Manufacturing Research and Standards - provide measurement methods, calibration standards, and a technical research base for interface standards and on-line quality assurance to enable U.S. discrete parts industries to develop more rapidly and adopt automation and other advanced manufacturing technologies. Scientific and technical activities focus on precision measurements of length and mass, precision manufacturing of mechanical parts, automated manufacturing, and robotics. Full-scale, real-time testing of many of the theories and concepts developed in this program are conducted at the NIST Automated Manufacturing Research Facility (AMRF).

Fire and Building Research - provides the scientific and technical basis for efforts to reduce the Nation's fire losses and the cost of fire protection by developing the technical basis for improved practices for fire hazard assessment, prediction, and reduction. The program also produces performance prediction, measurement and test methods to improve the usefulness, safety and economy of buildings, increases the productivity and international competitiveness of the construction industry, and reduces losses from earthquakes and structural failures.

Technical Reimbursable Services - comprised of the NIST Law Enforcement Standards Laboratory (LESL), which is totally supported by reimbursable funds. LESL develops performance standards to assist state and local governments in law enforcement.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical measurements	Pos./BA	192	$16,943	300	$28,243	108	$11,300
	FTE/Obl.	204	16,843	248	22,743	44	5,900
Lightwave measurement technology (fiber-optics)	Pos./BA	–		50	5,500	50	5,500
	FTE/Obl.			15	3,220	15	3,220

Lightwave Measurement Technology (Fiber-Optics) - This increase will enable NIST to provide measurement support essential to the competitiveness of the U.S. fiber optics communications industry.

Background

Coupled with the increases in fiscal years 1987 through 1990, totaling $1,950,000, the fiscal year 1991 increase will enable NIST to provide significantly expanded measurement support for the opto-electronic components used in fiber optic communications systems. The earlier increases funded development of partial measurement support for a first group of components (light sources, detectors, and waveguides) and partial measurement support for a second group (modulators, demodulators, and couplers). The fiscal year 1991 request completes support for the first two groups and provides partial measurement support for the first elements of a third group of components and technologies (hybrid and integrated-optic circuits, materials characterization, multiplexing, coherent communications, switches, amplifiers, long-wavelength fibers, and system performance). Measurement support for all three of these groups is critical to the cost, quality, and performance, and hence the competitiveness, of U.S. fiber optic systems.

The Competitive Issue

The U.S. faces formidable competition in pursuing the expanding world market for optical fibers and opto-electronic components. Opto-electronic components send, receive, and process the signals carried by optical fibers. The Japanese have reached a par with the U.S. in fiber technology and are ahead and gaining in opto-electronic components. The Europeans and Canadians are proving major competitors, too. Preeminence in opto-electronic technology is essential to competitiveness in fiber optic communications and to the emerging areas of optical information storage, optical data disks, optical fiber sensing, and optical computing. Collectively, the markets for these technologies will be of major importance to the U.S. economy.

The Technology

Large amounts of optical fiber and large numbers of opto-electronic components will be required to meet the combined needs of long-distance cross-country lines, undersea lines, and local loops. The local loops will provide fiber connections directly to users. The fibers and opto-electronic components used in these systems must deliver high performance and high reliability. The systems developed with these components will carry voice, video, and computer data at tremendous speeds. They will serve companies, governments, and individuals.

The installation of local loops will contribute significantly to the market for components; local loops will eventually constitute 90% of the links in new optical fiber systems, based on the present telephone system. International competition to supply components for local loops and long-distance lines, both cross-country and undersea, is intense and affects both optical fibers and opto-electronic components.

The Role of NIST in the Technology

NIST can strengthen the U.S. competitive position by providing the measurement capability required by U.S. industry for developing and selling more competitive opto-electronic components in the world market. Specifically, NIST will provide measurements that support: industrial R&D toward higher performance products; quality control during manufacturing; reduced manufacturing cost; voluntary industry standards for compatibility and other aims; proof of performance in the marketplace; product acceptance in both domestic and international markets; and representation of U.S. interests in international standard setting activities that affect the sale of U.S. products abroad.

NIST Response to Industry Needs

For industry to realize these benefits, NIST must develop new measurement methods. NIST must resolve differences among existing measurement methods already in use in industry. NIST must foster adoption of the resulting measurement solutions by U.S. manufacturers and acceptance by domestic and international customers. These are unique NIST roles. Only NIST has the combination of recognized impartiality and competence in measurement science that enables manufacturers and buyers to work together with NIST to identify and resolve measurements problems impairing U.S. competitiveness. International buyers continue to rely on NIST as the official U.S. source of measurement methods critical to the acceptance of U.S. products in international markets.

NIST has already demonstrated that it delivers. For example, NIST has provided the measurement basis for 28 voluntary industry measurement standards that support the development and sale of optical fibers. NIST has developed its first measurement methods, national reference standards, and measurement theories for critical aspects of the performance of light sources, detectors, modulators, and couplers. The first of these to be completed, a new national reference standard for the optical power output of light sources, is already in heavy service to industry. At industry's request, NIST is presently conducting round robin measurement intercomparisons with industry to improve measurements of geometrical features and information capacity of fibers; these measurements are essential to industry's efforts to achieve higher levels of system performance and component compatibility for improved competitiveness.

Economic Impact

The rapid growth of fiber optic communications systems is driven by their high information capacity, attractive cost, and immunity to interference. The 1989 international market for fiber optic components is estimated at $3.2 billion and has been growing at about 25 percent per year. This market is expected to reach $11 billion per year by the year 2000. The market value of optical fiber systems and services will be even greater. For example, the two undersea fiber optic lines now in place cost a total of $1 billion to construct. Undersea lines alone will constitute a worldwide investment of $8.5 billion over the period 1988-1996.

NIST has estimated that the economic benefits of its full plan for measurement support for opto-electronic components will exceed $1 billion in the next decade for productivity growth alone; further benefits will accrue from improvements in product quality, reductions in transaction costs, increases in market share, and other gains. Even further benefits will be reflected in systems and services.

NIST Output

- Develop balance of measurement support needed for a first group of components (light sources, detectors, and waveguides) and for a second group of components (modulators, demodulators, and couplers).
- Develop partial measurement support for the first elements of a third group of components and technologies (hybrid and integrated-optic circuits, materials characterization, multiplexing, coherent communications, switches, amplifiers, long-wavelength fibers, and system performance).

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: Lightwave Measurement Technology (Fiber-Optics)

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$571	$571
11.9	Total personnel compensation	571	571
12.1	Civilian personnel benefits	154	154
21	Travel and transportation of persons	160	160
22	Transportation of things	92	92
23.3	Communications, utilities and miscellaneous charges	199	199
24	Printing and reproduction	14	14
25	Other services	224	224
26	Supplies and materials	354	354
31	Equipment	1,452	1,452
99	Direct obligations	3,220	3,220
	Transfer to the Working Capital Fund		2,280
	Total increase requested		5,500

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: Lightwave Measurement Technology (Fiber-Optics)

Title	Grade	Number	Annual Salary	Total Salaries
Electronics engineer	15	4	$59,216	$236,864
Physicist	15	4	59,216	236,864
Electronics engineer	14	3	50,341	151,023
Physicist	14	3	50,341	151,023
Electronics engineer	13	5	42,601	213,005
Physicist	13	4	42,601	170,404
Electronics engineer	12	4	35,825	154,546
Physicst	12	4	35,825	143,300
Technician	11	3	29,891	89,673
Technician	9	4	24,704	98,816
Administrative/technical support	9	6	24,704	148,224
Administrative officer	7	1	20,195	20,195
Technician	7	2	20,195	40,390
Secretary	5	3	16,305	48,915
Total		50		1,903,242
Less lapse.......70%		(35)		(1,332,242)
Total full-time permanent		15		571,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	15
Authorized Positions:	
Full-time permanent	50

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical measurements	Pos./BA	192	$16,943	300	$28,243	108	$11,300
	FTE/Obl.	204	16,843	239	22,743	35	5,900
Advanced semiconductors	Pos./BA			14	3,900	14	3,900
	FTE/Obl.	—		41	1,880	41	1,880

Advanced Semiconductors - This request proposes a program of technical support services for the electronics industry for new generations of semiconductor devices.

The Competitive Issue

Maintaining a successful competitive industrial position in the future for any country without a strong electronics industry is unthinkable. Electronics affects every aspect of life today. Electronic systems are integral parts of the Nation's defense, communication systems, transportation, medical care, banking, manufacturing, etc. Electronics is the largest manufacturing segment of the U.S. economy, amounting to some $248 billion in 1988 and growing at 11 percent annually. It employs 2 million people. The growth and impact of electronics has always depended on advances in the electron devices, especially semiconductor integrated circuits, on which it is based. The National Research Council (NRC) has said, "Over the past three decades, no single field of science or engineering has had a greater impact on the national productivity and quality of life in the United States than has semiconductor microelectronics."

Japan continues to be our major competitor. The U.S. semiconductor industry, a major supplier to the electronics industry, produced $22 billion of products in 1988. Japan produced the same amount, about 45 percent of the world market. However, over the past five years Japan has gained a 10 percentage point share of the world market at U.S. expense.

The competitive problems faced by the U.S. semiconductor and related industries are well known. Many significant studies, including those by the National Research Council (1986) and by the Defense Science Board (1987), have emphasized the seriousness of the U.S. deficiency in semiconductor manufacturing technologies. Worldwide, the $50 billion semiconductor device market and the $8 billion semiconductor manufacturing equipment market are at stake. Japanese companies, while highly competitive with one another, are the beneficiaries of a variety of well-funded long-term programs of generic technological development initiated by their government. Only recently has the U.S. responded by establishing SEMATECH, a consortium to rebuild U.S. excellence in semiconductor manufacturing. It is funded about equally by the fourteen member companies and by the U.S. government.

The NRC report notes that the U.S. has lost the lead in optical lithography, ceramic packages, and semiconductor materials and is losing the lead in processing equipment. The Japanese lead in several new technologies including microwave plasma processing, radiation sources for lithography, electron and ion microbeams, laser-assisted processing, compound semiconductor processing, and three-dimensional device structures.

The Technology:

The breadth of science and technology used in electronics is rapidly expanding. The scale of dimensions is rapidly shrinking. The following figure shows this evolution. The figure also shows three possible ways to produce integrated circuits over the next decade: new generations of semiconductors, superconductors, and devices built up atom by atom. This initiative addresses the necessary technical support from NIST for new generations of advanced semiconductor devices.

EVOLUTION OF THE TECHNOLOGY

Size of Device	Technology	Time Period
centimeter (cm)	Vacuum Tube	1925-1960
millimeter (mm)	Transistors	1950-
micrometer (μm)	Integrated Circuits	today
sub-μm	**Advanced Semiconductors** - Silicon - Gallium Arsenide Superconducting Devices - Low Temp. - High Temp.	tomorrow
atomic size	Atomic Manipulation - Quantum Wells, Wires, and Dots	2000 (?)

Problems of imperfect understanding and inability to measure what is being done abound. Integrated circuits today are built using poorly understood chemical processes for deposition and etching of surface films. The effects of surfaces, on which films are deposited, on the eventual performance of electronic devices are not understood, but they are becoming ever more important as the size of circuits decreases. A clear view of what is being made requires electron microscopes, but accurate dimensional measurements with these are not now possible. Soon it will be necessary to create ultra-small patterns using x-rays from synchrotron sources. Control of contamination from particles and stray impurities is proportionally more critical at smaller scales. As device dimensions shrink, their behavior changes significantly. Previously negligible effects become important, and must be accounted for in engineering design.

Role of NIST in the Technology

The NIST program will strengthen the U.S. competitive position, improve productivity, and benefit manufacturers and buyers of electronics materials, manufacturing equipment, and devices by providing specific new knowledge, test methods, data, and computer models needed to diagnose the most urgent problems that limit the performance of new and advanced electronic devices; develop monitoring methods for selected fabrication processes, manufacturing equipment, and materials to improve reproducibility and product yields; and link the most critical materials and process properties to device performance.

Manufacturing integrated circuits is a measurement-intensive business. It has been estimated that about one quarter of the cost of semiconductor device manufacturing is in measurement. As semiconductor devices become smaller and smaller and chips become more and more complex, the demands on measurement technology increase. Better sensitivity, improved accuracy, totally new measurements, and the pressure to automate the manufacturing process are all needs that must be met. New materials and new processes bring with them new measurement problems which must be solved. Industry is coming to recognize that absolute accuracy is needed in competitive manufacturing. The mission of NIST is to develop and supply the advanced metrology and other technical support needed by industry. The electronics industry, including consortia like SEMATECH, expects its measurement needs to be met by NIST. Collaborations already exist with numerous semiconductor firms, universities, other government laboratories, and SEMATECH.

SEMATECH will apply technology to improve U.S. semiconductor manufacturing abilities, with emphasis on processing equipment, on a tight time scale. Its manufacturing focus is very strong but the scope of the technology under development is limited to conventional silicon-based electronics. Next generation integrated circuits will be based on advanced silicon and gallium arsenide; they are important parts of the broader NIST research program. Neither of these is part of the SEMATECH mission.

The measurements performed at NIST are important to SEMATECH. SEMATECH will fund only short term developments specific to immediate needs. The NIST role is to conduct long-term generic metrological research underlying such applications, and needed industry-wide, as befitting NIST's lead agency role in metrology. NIST is the only source of the special metrological expertise which SEMATECH needs but does not have for measuring properties of starting materials, the results of successive processing steps applied to those materials, and the characteristics of the finished product. SEMATECH can provide an excellent vehicle for delivering NIST's results to the industry. SEMATECH's pilot process line can be the test bed for demonstrating the value of NIST's work. Close communication between NIST and SEMATECH will allow NIST to deliver its product preferentially to U.S. industry without the usual publication delays. Foreign firms will not get these results until later.

External relationships have proved to be invaluable conduits for understanding the real metrological issues for NIST to address and for delivering the results of NIST's work. NIST's already strong connections with private-sector standards organizations provide the means to establish measurement standards for industrial and government use. New work will both broaden the range of subject matter covered by these collaborations and increase their number.

NIST Response to Industry Need

Semiconductor manufacturing is a complex sequential process of up to 500 steps. Most of these steps cause irreversible changes, so if a processing error occurs the wafers are useless. Measurement is not always possible after every step and almost never during a step. Measurement uncertainties limit the degree of process control which is possible. Inaccurate measurements can cause defective material to appear to be within control limits, causing money to be spent on further processing of material which is in fact scrap. Or good material may appear to be defective, and be thrown away needlessly.

This initiative delivers a selection of improved or new marketplace and process control measurements. These activities will bring a larger part of NIST's expertise to bear on electronics related matters. The devices of today, and even more the devices of tomorrow, require increasingly complex structures and better understood and controlled manufacturing processes. Many of these processes are now performed using equipment that was developed empirically, lacking any better way. The next generations of equipment cannot be developed without more exact information concerning the processes to be executed.

Work is planned on the most urgent measurements of feature size in microlithography down to 0.1 μm, required for x-ray masks and patterns; on the fundamental mechanisms of selected plasma processes, essential for etching and deposition of thin films on semiconductor substrates; on the application of test structures to control selected manufacturing processes at the smaller dimensional scales that will be required; on certain microscale failure mechanisms in semiconductor device packages, and on materials and the interfaces between them important for device packaging; on the highest priority techniques for measuring the properties of very thin semiconductor materials and structures; on measurements of extremely small particles and very low levels of moisture in process gases; and on measurements of specific performance attributes of advanced semiconductor devices and of electrical current flow in device structures. Standard Reference Data are to be developed for specific topics, as are the most urgent Standard Reference Materials for calibration of measurement and analysis instruments.

Economic Impact

Historically the use of NIST measurement technology has increased the productivity of U.S. industry. An independent study covering a 5-year period attributes 20 percent of the entire productivity increase achieved by the semiconductor industry to improvements directly resulting from NIST services. In specific projects, such as silicon resistivity, wire bonding, and linewidth technology, the benefit-to-cost ratio of NIST research has been estimated to be as high as 100 to 1. For the case of improved measurements of linewidth on photomasks used to produce semiconductor integrated circuits, the saving to the electronics industry was $30 million in 1987 alone. Industry leaders have estimated an overall saving from NIST services to be up to $500 million per year. Through technology developed in this initiative, NIST will help stabilize and insure the future of a $22 billion semiconductor industry.

NIST Output

- Develop new measurement methods to support research, development, manufacturing, and procurement tests to facilitate acceptance and sale of U.S. products in domestic and international markets.
- Establish technical basis for voluntary standards that facilitate commerce and encourage customer acceptance of U.S. products.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Research and Standards
Program Change: Advanced Semiconductors

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth.
11.1	Full-time permanent	$810	$810
11.9	Total personnel compensation	810	810
12.1	Civilian personnel benefits	219	219
21	Travel and transportation of persons	133	133
22	Transportation of things	78	78
23.3	Communications, utilities and miscellaneous charges	144	144
24	Printing and reproduction	9	9
25	Other services	255	255
26	Supplies and materials	172	172
31	Equipment	60	60
99	Direct obligations	1,880	1,880
	Transfer to the Working Capital Fund		2,020
	Total increase requested		3,900

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Research and Standards
Program Change: Advanced Semiconductors

Title	Grade	Number	Annual Salary	Total Salaries
Chemist	15	1	$59,216	$59,216
Electronics engineer	15	1	59,216	59,216
Physicist	15	1	59,216	59,216
Chemist	14	1	50,341	50,341
Computer scientist	14	1	50,341	50,341
Electronics engineer	14	1	50,341	50,341
Mathematician	14	1	50,341	50,341
Mechanical engineer	14	1	50,341	50,341
Physicist	14	2	50,341	100,682
Chemical engineer	13	1	42,601	42,601
Computer scientist	13	1	42,601	42,601
Electronics engineer	13	1	42,601	42,601
Materials scientist	13	1	42,601	42,601
Physicist	13	2	42,601	85,202
Chemist	12	1	35,825	35,825
Electronics engineer	12	1	38,637	38,637
Engineering technician	12	1	35,825	35,825
Chemist	11	1	29,891	29,891
Technician	11	4	29,891	119,564
Technician	10	2	27,206	54,412
Electronics engineer	9	1	31,490	31,490
Technician	9	3	24,704	74,112
Administrative/technical support	9	5	24,704	123,520
Technician	8	1	22,367	22,367

Title	Grade	Number	Annual Salary	Total Salaries
Administrative assistant	7	1	20,195	20,195
Data clerk	7	2	20,868	41,736
Secretary	5	2	17,936	37,872
Total		41		1,451,087
Less lapse.......45%		(18)		(641,087)
Total full-time permanent		23		810,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	23
Authorized Positions:	
Full-time permanent	41

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Electronics and electrical measurements	Pos./BA	192	$16,943	300	$28,243	108	$11,300
	FTE/Obl.	204	16,843	248	22,743	44	5,900
High temperature superconductors	Pos./BA			17	1,900	17	1,900
	FTE/Obl.			6	800	6	800

High Temperature Superconductors - This request proposes a program of technical support services for new superconducting components and electronic devices.

The Competitive Issue

The discovery of superconductivity at temperatures above that of liquid nitrogen, 77 kelvin (-321 deg. F), has stimulated intense international competition for lucrative and diverse new markets for superconductors in transportation, medicine, and research. Japan continues to be our major competitor. Superconductors are relatively new in the commercial market, currently serving medical diagnostics and other specialized research and instrumentation applications. Japanese projections show the possibility of a $40 billion market for superconductors by the year 2000 largely driven by the recent discovery of materials that become superconducting at the temperature of liquid nitrogen, rather than at the much lower (and much more costly to maintain) temperature of liquid helium. Industry and government in both the U.S. and Japan are investing heavily, and about equally, in high temperature superconductivity.

The Technology

A superconductor technology already exists, but is of limited scope because of the need to refrigerate present day materials to their working temperature near the boiling temperature of liquid helium, or -452 deg. F. Despite the high cooling costs, the accurate measurement of voltage using superconducting devices is well established, and a commercial signal analyzer is on the market now. NIST is recognized as a leader in measurements in this field. Magnetic resonance imaging is a medical diagnostic system based on this technology that now enjoys a multi-billion dollar market.

In order to reap the benefits of the new high temperature superconducting materials, industry needs: reproducible techniques for preparing components and devices having the requisite properties; methods for characterizing these materials and the devices prepared from them; and test procedures for determining the electronic, thermal, and mechanical properties of these materials in both bulk and thin film form.

The development of new superconducting electronic devices could represent a major application of the high temperature superconducting materials. The breadth of science and technology used in electronics is rapidly expanding. The scale of dimensions is rapidly shrinking, and the challenge to manufacturing is increasing. There are three possible ways to produce integrated circuits over the next decade: new generations of semiconductors, superconductors, and devices built up atom by atom. This initiative addresses the necessary technical support which requires to develop the measurement technology needed for new generations of superconducting devices.

Role of NIST in the Technology

The existing NIST high temperature superconductivity program emphasizes processing and property characterization of both bulk materials and thin films. In particular, the NIST program provides: (1) definition and measurement methods for the electrical and magnetic characteristics of superconductors and their variation with operating conditions; (2) composition and structural analysis of experimental materials; (3) data for the design and control of fabrication processes; and (4) development of superconducting electronic devices for measurement systems, signal processing and other functions. NIST achieves high leverage by providing measurement capability that accelerates the superconductor programs conducted by industry, universities, Government agencies, and other national laboratories. The program has had a number of significant impacts on both the science and technology of high temperature superconductivity. NIST has emerged as a leader among Federal laboratories in the development of superconducting electronic devices, and was designated by President Reagan as the Center of Excellence for this work. The challenge to be met by NIST calls for substantially increased resources to provide the necessary measurement support over the wide range of potential applications for high temperature superconductivity.

NIST Response to Industry Need

Work is planned at NIST on advanced techniques for measuring the superconducting properties of high temperature superconductors in both thin film and bulk form, evaluation of the electrical and physical properties of new superconducting materials, and on new fabrication techniques for superconducting materials. Also addressed will be measurements of the performance of advanced superconductor devices, details of electrical current flow in device structures, and standard test methods to measure the superconducting characteristics of materials.

The initiative will allow NIST to make important contributions to high temperature superconductivity technology such as measurement methods for processing and properties of bulk materials, thin films and finished devices. Based on the projected economic impact of superconducting electronics, and the timing for these new electronic systems to reach the marketplace, technical support for the development of marketable superconducting electronic devices is a primary component of this work. The NIST technical effort will examine a number of techniques for the preparation and characterization of both superconducting thin film devices and bulk components, investigate factors limiting current density in high magnetic fields, and expand the number of superconducting systems to be explored in order to take advantage of higher-critical-temperature materials.

NIST Output

- Standardization of measurement methods for superconductor properties. Present diversity causes variations among reported results of more than a factor of ten.
- Expansion of capability for chemical compositional mapping as an essential step towards understanding the relationship among processing, structure and properties.
- Expansion of the existing effort on phase equilibria to include work on thallium based materials and other materials of high potential. Phase equilibrium diagrams are the basic data for the design of fabrication processes.
- Establishment of processes to fabricate thin film microcircuits, including Josephson junctions, lithography, insulating crossovers, resistors and other active and passive components. These are the foundation of any application to electronics.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: High Temperature Superconductors

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase (Decrease) Budget Auth.
11.1	Full-time permanent	$216	$216
11.9	Total personnel compensation	216	216
12.1	Civilian personnel benefits	58	58
21	Travel and transportation of persons	60	60
22	Transportation of things	26	26
23.3	Communications, utilities and miscellaneous charges	72	72
24	Printing and reproduction	6	6
25	Other services	228	228
26	Supplies and materials	103	103
31	Equipment	31	31
99	Direct obligations	800	800
	Transfer to the Working Capital Fund		1,100
	Total increase requested		1,900

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: High Temperature Superconductors

Title	Grade	Number	Annual Salary	Total Salaries
Electronics engineer	15	1	$59,216	$59,216
Physicist	15	1	59,216	59,216
Ceramicist	14	1	50,341	50,341
Electronics engineer	14	1	50,341	50,341
Ceramicist	13	1	42,601	42,601
Research chemist	13	1	42,601	42,601
Electronics engineer	12	2	38,637	77,274
Mechanical engineer	12	1	36,645	36,645
Physicist	12	1	35,825	35,825
Technician	11	1	29,891	29,891
Technician	9	1	24,704	24,704
Administrative/technical support	9	2	24,704	49,408
Editorial assistant	7	1	20,195	20,195
Technician	7	1	20,195	20,195
Secretary	5	1	17,936	17,936
Total		17		616,389
Less lapse.......65%		(11)		(400,389)
Total full-time permanent		6		216,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	6
Authorized Positions:	
Full-time permanent	17

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Manufacturing research and standards	Pos./BA	75	$6,786	124	$11,786	49	$5,000
	FTE/Obl.	81	6,786	115	11,006	34	4,220
Intelligent machines	Pos./BA			49	5,000	49	5,000
	FTE/Obl.			34	4,220	34	4,220

Intelligent machines - This request proposes a program to address fundamental measurement theory, automation, and related interface and product data exchange standards that industry needs to support advanced manufacturing.

The Competitive Issue

Successful competition by U.S. industry in international markets will increasingly demand the development and use of intelligent machines. Intelligent machines produce goods that have higher quality, lower cost, more modern designs, and functional characteristics which are specifically tailored to meet rapidly changing market demands. Because of the increasing variety, complexity, sensitivity, and the need for flexibility of manufacturing processes required to produce such world-class products, manual machines controlled by even the most knowledgeable workers are inadequate to the task. What is needed is an intelligent machine which can, on its own, achieve a goal set for it by a human, over a wide variety of processing conditions. In the near future, intelligent machines will impact the entire range of manufacturing, extraction, construction and service industries, including military and space applications.

In Europe and Japan, multi-billion dollar government-industry programs are aimed at the development and commercialization of advanced manufacturing technologies. In a recent paper, the Dean of MIT's School of Management emphasized the importance of improvements in process technologies as a key to being competitive in the world market. As an example of the need to improve process technology, he cited the loss of the video recorder business in this country because production costs could not be reduced sufficiently. In the future, in the U.S. automobile industry, the products of which represent two-thirds of the negative U.S. balance of trade in manufactured goods, successful development and deployment of intelligent machines may make the difference in the viability of the industry and its domestic suppliers.

The Technology

Intelligent machines consist of advanced sensors to measure critical product characteristics, computerized knowledge to give instructions and to compare with real measurements, and physical manipulators to perform the work. These elements are integrated into a system under an architecture of real-time intelligent control; that is, when something starts to go wrong, the machine corrects itself without human intervention. Potential applications of intelligent machines in automobile manufacture range from the formation of parts to assembly of such parts into components, and components into finished automobiles. Applications in aircraft manufacture include the flexibly automated assembly of components and robotic assembly of large-scale structures such as the aircraft itself.

What are the technical barriers to the full utilization of intelligent machines? Industry needs a better understanding of intelligent machines and the production processes they are to control as well as models and other means to represent process knowledge in forms which machines can interpret. Industry also needs advanced sensors, including non-destructive ones, for determining the form and properties of a product in the production process, which can be used by an intelligent control system to effectively change processing conditions in order to meet product specifications. Better measurement technology and standards are needed to determine the various parameters involved in the manufacturing processes. Finally, in any systems technology, both hardware and software components are supplied by many different vendors. Users are not currently able to integrate components into optimum systems to realize potential productivity nor to integrate the data from different functions over the product life cycle.

The solution to the problems related to designing, commercializing and managing a product over its life-cycle is the ability to capture the knowledge gained during these processes and to represent and exchange that knowledge. The technical challenge is the development of the information technology and the associated standards that will define the environment for the representation of product knowledge. In one such area, a standards effort is already underway and is called "Product Data Exchange Specification" (PDES) used for the integration and the exchange of product and process data. The primary objective of the PDES effort is the development of a standardized, computer-based definition of a product. PDES will allow the development of a common computerized language for industry that would enable every part of the manufacturing process - from soliciting bids to general design to retooling plants to making parts - to be guided by computers.

The Role of NIST in the Technology

This proposed budget increase will enable NIST to work with industry to (a) establish a generic technology base for a number of the manufacturing technologies which are particularly amenable to the adoption of intelligent machines, and (b) develop the measurement capabilities to facilitate the acceleration of this technology into global markets by our domestic industry, and (c) facilitate, with the industry consortium PDES, Inc., the joint industry/government effort to accelerate the development, validation, and implementation of PDES software tools for mechanical parts.

NIST Response to Industry Needs

Under this initiative, NIST will conduct collaborative, interdisciplinary research on systems involving the processing of sensory data, the computer representation of product-and-process knowledge, and the intelligent control involved in production of finished goods. This generic work will complement industry work on specific physical manipulators. In the conduct of this program, NIST will collaborate with U.S. industry: through trade associations such as the Robotic Industries Association; through development-oriented consortia such as the National Center for Manufacturing Sciences; and through the NIST Research Associate cooperative programs with individual firms.

A range of disciplines and supporting technologies including robotics and information technology will be applied to develop the technology base necessary to measure the performance of and establish standards for future generations of intelligent machines. The program will build on NIST work on real-time control theory which forms the basis of its highly regarded Automated Manufacturing Research Facility (AMRF). NIST will also develop, in collaboration with industry and university counterparts, non-product-specific technologies underlying future commercial intelligent machines based on that AMRF work.

For example, this generic technology will lead to a pre-commercial version of an intelligent control system, based on a NIST-developed standard reference model, that could be used by industry, government, and university labs for a wide variety of intelligent systems applications. In addition, the generic technology will involve creating a prototype version of a knowledge database demonstrating how that information can be used to help control a process by establishing a set of rules and constraints which link data elements describing the product with those describing the process.

To support the market-transaction requirements for rapid commercialization and market penetration of the technology, the proposed NIST program will develop a range of standards, measurement methods and laboratory-based testing capabilities. NIST will establish the capability to evaluate the performance of intelligent machines in a laboratory setting. This will allow the test and verification of a formal theory of intelligent machines and validation of the open system architecture based upon it. NIST will develop, in collaboration with U.S. industry, draft interface standards for intelligent machines based on that architecture to facilitate application of intelligent systems technology.

The PDES component of this program will consist of a technical coordination and leadership of the efforts of government, industrial, and academic organizations. NIST will spearhead a national plan for the development of product and process knowledge, system framework, and standards to enable U.S. industry to design and manufacture products at competitive market costs with minimum delay between concept and marketing. PDES will allow U.S. industry to cut development time and result in a product much closer to the original designer's intentions. PDES will also give manufacturers greater flexibility in designing and producing a wider variety of "world class" products on short notice and in short production runs--a necessity in today's competitive global market.

The Economic Impact

The proposed advances in generic technology and associated standards will permit a more rapid development of automated manufacturing in the U.S., including participation--both as vendors and users--of small, innovative companies. The manufacturing industries affected by automation technologies account for 75 percent of the manufacturing sector's contribution to the GNP. This automated technology would make the United States competitive with countries having lower labor costs as well as in markets in which human skills are not sufficient to carry out the manufacturing process accurately. Overall, the resulting advanced product offerings and higher productivity of U.S. firms will translate into more favorable competitive positions in global markets.

NIST is submitting a companion initiative on Intelligent Processing of Materials. There are areas of common research in intelligent automated control of manufacturing processes that relate to both materials and parts. Close coordination in planning and implementation of these research programs has occurred, and will continue.

NIST Output

- Conduct research on an open-systems-architecture, standard reference model for intelligent machine systems to support their competitive and commercially-efficient specification, design, construction, and procurement, and develop a laboratory capability for comparing performance of machines against that reference model.
- Develop interface standards for intelligent machine systems, based on that architecture and reference model, that will speed their commercial development, promote competition, and facilitate their incremental implementation and upgrading.
- Develop, in collaboration with U.S. industry, a pre-commercial version of an intelligent control system with an open-system-architecture and standardized interfaces which may be subsequently commercialized for use by industry, government, and university labs in a wide variety of R&D applications.
- Coordinate the Government Interagency PDES Task Force, lead the voluntary standards IGES/PDES Organization, and collaborate with the industry consortium PDES, Inc.
- Conduct basic research in the fundamental science of intelligent machine systems, performing experiments in machine vision, sensory data fusion, knowledge representation, decision theory, intelligent controls, adaptive and learning systems, and software engineering.
- Develop quantitative methods for measuring the performance of intelligent machines. These will include both theoretical and empirical performance measures.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Research and Standards
Program Change: Intelligent Machines

Object Class		1991 Increase/ (Decrease) Oblig.	1991 Increase/ (Decrease) Budget Auth
11.1	Full-time permanent	$1,269	$1,269
11.9	Total personnel compensation	1,269	1,269
12.1	Civilian personnel benefits	342	342
21	Travel and transportation of persons	213	213
22	Transportation of things	81	81
23.3	Communications, utilities and miscellaneous charges	316	316
24	Printing and reproduction	11	11
25	Other services	1,609	1,609
26	Supplies and materials	297	297
31	Equipment	82	82
99	Direct obligations	4,220	4,220
	Transfer to the Working Capital Fund		780
	Total increase requested		5,000

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Research and Standards
Program Change: Intelligent Machines

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	15	4	$59,216	$236,864
Mechanical engineer	15	1	59,216	59,216
Electrical engineer	14	1	50,341	50,341
Mechanical engineer	14	2	50,341	100,682
Computer scientist	14	4	50,341	201,364
Mechanical engineer	13	2	42,601	85,202
Computer scientist	13	4	42,601	170,404
Structural engineer	13	1	42,601	42,601
Electrical engineer	13	3	42,601	127,803
Electronics Engineer	13	1	42,601	42,601
General engineer	13	1	42,601	42,601
Mechanical engineer	12	3	36,645	109,935
Computer scientist	12	2	35,825	71,650
Mathematician	12	1	35,825	35,825
Electrical engineer	12	1	36,645	36,645
Computer scientist	11	2	29,891	59,782
Computer programmer	11	1	29,891	29,891
Engineering technician	11	1	29,891	29,891
Administrative/technical support	9	6	24,704	148,224
Computer programmer	9	1	24,704	24,704
Engineering technician	7	3	20,195	60,585
Administrative assistant	7	1	20,195	20,195
Secretary	5	3	17,936	53,808
Total		49		1,840,814
Less lapse.......31%		(15)		(571,814)
Total full-time permanent		34		1,269,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	34
Authorized Positions:	
Full-time permanent	49

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Fire and building research	Pos./BA	101	$9,821	95	$9,321	(6)	($500)
	FTE/Obl.	108	9,821	102	9,321	(6)	(500)
Alternative refrigerants and ignition of upholstery	Pos./BA	6	500	0	0	(6)	(500)
	FTE/Obl.	6	500	0	0	(6)	(500)

Alternative refrigerants and ignition of upholstery - The Administration requests full funding of the Fire and Building Research programs for fiscal year 1991, excluding two earmarked projects. The requested funding includes high priority projects such as earthquake-related research, structural safety engineering, research in building mechanical systems, toxicity studies of combustion products, computer modeling of smoke and fire spread, behavior of materials in fires, and fire grants.

NIST received $250,000 in fiscal years 1989 and 1990 to accelerate research to find alternatives to those refrigerants contributing to the depletion of the ozone layer and to the greenhouse effect. The Department of Commerce role in global warming is coordinated by NOAA.

NIST also received $250,000 in fiscal years 1989 and 1990 to recommend an improved full-scale test method for the flammability of upholstered furniture. The highest priority work for this project will be completed by the end of fiscal year 1990.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: Alternative Refrigerants and Ignition of Upholstery

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	($254)
11.9	Total personnel compensation	(254)
12.1	Civilian personnel benefits	(66)
21	Travel and transportation of persons	(4)
22	Transportation of things	(2)
23.3	Communications, utilities and miscellaneous charges	(81)
24	Printing and reproduction	(2)
25	Other services	(61)
26	Supplies and materials	(28)
31	Equipment	(2)
99	Total	(500)

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Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards
Program Change: Alternative Refrigerants and Ignition of Upholstery

Title	Grade	Number	Annual Salary	Total Salaries
Fire protection engineer	14	(1)	$50,342	($50,342)
Toxicologist	14	(1)	50,342	(50,342)
Physicist	14	(1)	50,342	(50,342)
Chemical engineer	13	(1)	42,601	(42,601)
Engineering technician	11	(2)	29,891	(59,782)
Total		(6)		(253,409)
Rounding adjustment		0		(591)
Total full-time permanent		(6)		(254,000)

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	(6)
Authorized Positions:	
Full-time permanent	(6)

Engineering Measurements and Standards
Reimbursable Program by Source of Support

(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$5,795	$6,454	$6,697
Army	4,934	5,239	5,543
Navy	10,384	6,236	11,666
Other	6,120	11,057	6,692
Subtotal, Department of Defense	27,233	28,986	30,598
Department of Commerce	53	28	30
Consumer Product Safety Commission	99	30	30
Department of Justice	1,612	1,648	1,747
Federal Emergency Management Agency	340	411	407
Department of Energy	3,295	3,364	3,565
Environmental Protection Agency	132	108	100
General Services Administration	1,099	923	978
Department of Health and Human Services	254	319	335
Department of Housing and Urban Development	468	211	526
Department of Interior	515	1,525	915
National Aeronautics and Space Administration	1,627	1,725	1,829
Nuclear Regulatory Commission	440	350	319
Department of Transportation	605	538	499
Veterans Administration	271	287	305
Other	107	779	592
Total, Other Agency	38,150	41,232	42,775
Calibrations and Tests	3,645	3,862	4,095
Standard Reference Materials (SRM)	541	617	603
Technical and Advisory Services	2,871	3,018	3,226
WCF Investment	0	200	6,280
Total, Reimbursable Program	45,207	48,929	56,979

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Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount	Per-sonnel	Amount
Computer sciences and technology	Pos./BA..	124	$9,488	124	$9,440	123	$9,919	159	$13,419	36	$3,500
	FTE/Obl..	133	9,377	139	9,625	137	9,919	164	13,419	27	3,500

NOTE: The first line for each entry represents permanent positions and budget authority; the second line reflects full-time equivalent employment and obligations.

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology

	1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Computer sciences and technology										
WCF transfers.......	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl.......	152	$13,369	152	$15,810	152	$14,758	152	14,758	0	0
Total.......	152	13,369	152	15,810	152	14,758	152	14,758	0	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
COMPUTER SCIENCES AND TECHNOLOGY

Goals and Objectives

Goals:

This subactivity supports the Department of Commerce goals of (1) improving the Federal Government's use of computers and related telecommunications systems; (2) promoting the development and application of science and technology in U.S. industries; (3) increasing the competitiveness of U.S. telecommunications, computer and information products and services; and (4) increasing the acceptance of international technical standards based on U.S. technology.

The goal of this subactivity, as derived from the recently augmented legislative mandates, is to conduct research and provide technical support to Federal agencies and to industry in the effective use of computers and related systems including: (1) provision of scientific and technological assistance to Federal agencies relating to computer and related telecommunications technology; (2) development and issuance of Federal Information Processing Standards and Guidelines necessary to ensure the efficient and effective acquisition, management, security, and use of information technology by the Federal Government and to preserve the competitive options of the American industry in the development of computer and related telecommunication products and services; (3) development of critically needed methods to protect information resources in distributed computer and telecommunication systems; and (4) promoting the use of Federal Information Processing Standards and Guidelines in order to reduce waste, error, and unnecessary duplication in the application of computer systems in the Federal Government.

Objectives:

- Develop standards and test methods to support computer security, data integrity, and risk management.
- Implement requirements under the Computer Security Act of 1987.
- Develop standards and test methods to support distributed and integrated systems for a wide variety of networked applications.
- Develop techniques for measuring the performance of advanced computer technology, and for measuring conformance to Federal Information Processing Standards.
- Study ways to improve the quality, reliability, and maintainability of software, and the portability of applications software.
- Develop standards and test methods for data and graphics exchange and for advanced communications.
- Assist Federal agencies in solving specific computer-related problems and introducing technology for improving productivity and programs, including the integration of standards for advanced applications using emerging technologies.

Base Program

The computer industry has sales of at least a $150 billion per year, with a positive trade balance. International competition is becoming increasingly more intense. Innovations in computer hardware, software, and digital communications will challenge managers to apply new technology for productivity increases throughout the American economy in the coming years and will have pervasive effects on industry structure and performance as well as on the quality of government services. Since small computers will be distributed throughout the workplace and computers will be used generally throughout government and the economy, computer integration, performance assurance, and security will become much more important. The merging of computer and telecommunications technology heightens the importance of an integrated approach to standards development for computer and related telecommunications systems. As the technology changes, it will be essential to find ways to enable organizations to preserve their investments in applications systems.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Computer sciences and technology	Pos./BA	123	$9,919	159	$13,419	36	3,500
	FTE/Obl.	137	9,919	164	13,419	27	3,500
Computer security	Pos./BA			24	$2,500	24	$2,500
	FTE/Obl.			18	$2,500	18	2,500

Computer Security - This increase will enable NIST to adequately respond to the "Computer Security Act of 1987." The Computer Security Act of 1987 assigns NIST the responsibility for developing standards and guidelines for Federal Computer Systems, including responsibility for developing standards and guidelines needed to assure the cost-effective security and privacy of sensitive information in Federal Computer Systems. These funds, combined with the current level of $2.5 million, are needed to respond to the Computer Security Act, including protection from viruses, worms, and other types of malicious software, by developing methods of assuring data confidentiality, integrity, availability, and reliability of Federal computer systems. This initiative will provide Government and industry with critically needed tools for protecting information resources in distributed computer and communications systems.

The Competitive Issue

Government and industry have become increasingly dependent on computer and telecommunications technology. This technology is evolving from simple, "stand-alone" systems to highly complex and interconnected "distributed" systems. Secure and reliable operation of these systems and protection of the valuable and sensitive information processed by them are vital to the operations of Government and industry, to the very health of the U.S. economy, and to the protection of U.S. citizens and U.S. Government assets.

For example, the recent Internet worm and other similar incidents have proven how disastrous such incidents can be to Government, educational, and commercial activities on a regional, national, or even global scale. Due to the speed with which "viruses" can reproduce and spread and to the degree of damage they can cause, they can result in massive losses in productivity, data, and perhaps most significantly, confidence in the systems themselves. If Government and commercial information technology applications and networks are not protected from all types of computer security threats, including "computer viruses", the effectiveness and viability of the services and business functions of these organizations would be severely threatened. The capability to produce systems with reliability, safety, and security assured at some level of confidence will greatly enhance the competitive position of the U.S.

The Technology

There is evidence that telecommunication networks, which link together computer systems within a nation, and also between nations, are vulnerable to the disclosure, modification, or destruction of vital information resources. Current computer systems and networks, including networks of networks, are so complex that it is extremely difficult to control access to computer systems tied to a network or even to detect unauthorized intruders. It has been demonstrated that "friendly" computer systems can be "taken over" by unsophisticated methods and made to act on the behalf of an intruder who is sitting at a computer or computer terminal halfway around the world. It is also evident that advanced technical threats (e.g., viruses, worms) to computer and network systems represent growing and serious threats. The technology needed to address computer and telecommunications security issues is only partially available today. Without new advances in technology and the timely transfer of this technology to Federal and commercial organizations, we can expect to see delays in new applications of computers because of unacceptable security risks or, even worse, the deployment of new applications in spite of the risks.

The Role of NIST in the Technology

The increasing complexity and criticality of computer-based systems make the potential damage from such threats of vital national, and even international concern to Government and industry. Federal Government agencies and industry are looking to NIST - the only organization with appropriate expertise and mission - to provide focus, direction, and technical guidance to address these increasing concerns. NIST is regarded as a neutral, objective organization that can work with both Government and industry to reach common solutions to common problems.

NIST's Response to Industry Needs

NIST develops standards and guidelines based on the result of laboratory research activities and inputs from private and Government organizations. These inputs include results from NIST as well as other research and development programs carried out by the private sector. The anticipated standards will be issued as Federal Information Processing Standards which are developed through a consensus process with participants from the Federal Government, as well as participants from all segments of the computer industry. Laboratory based support is necessary during the standards development process in order to demonstrate effectiveness of the standards and to develop and implement validation criteria. In response to industry needs for protection from "computer viruses", NIST will play a lead role by establishing a program to build a cooperative network of computer security incident response centers, to establish a NIST center as the hub of the network of response centers, and to provide guidance and assistance to federal and private organizations that wish to establish their own response centers as part of the network. The program will help ensure that the several communities with vital interests in computer and telecommunications security are better able to respond to acute situations, share information, and coordinate resources to more effectively protect information systems throughout Government and industry.

Economic Impacts

The pervasive use of computer systems and networks in both the Federal Government and private sectors has resulted in increased risk of losses to organizations that depend upon these resources to conduct their business functions. For example, the information technology industry and its customers have expressed strong concerns about the potential damage computer viruses can inflict on the current generation of computer systems. Electronic funds transfer networks, which collectively transfer more than $400 billion daily, are "at risk" from a variety of security threats including computer viruses. The increasing complexity and criticality of these and other systems make the potential damage from such threats a major concern of both Government and industry. Consequently, the effective use of computer security technology is essential to reducing risks and costs and to improving U.S. productivity in all sectors of the economy.

NIST Output

- Operate Open Systems Interconnection (OSI) laboratory to investigate methods for network security and to develop standards and conformance test methodologies.
- Establish an emergency response system to address computer virus threats.
- Conduct research efforts to develop a risk management methodology for distributed computer systems.
- Perform research to define audit trail requirements for operating systems that support distributed systems.
- Develop a guidance document that identifies the issues and risks of using distributed database systems.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology
Program Change: Computer Security

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	$732
11.9	Total personnel compensation	732
12.1	Civilian personnel benefits	198
21	Travel and transportation of persons	89
22	Transportation of things	41
23.3	Communications, utilities and miscellaneous charges	257
24	Printing and reproduction	20
25	Other services	706
26	Supplies and materials	247
31	Equipment	210
99	Direct obligations	2,500

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology
Program Change: Computer Security

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	15	4	$59,216	$236,864
Computer scientist	14	3	50,341	151,023
Electrical engineer	14	1	50,341	50,341
Computer scientist	13	3	42,601	127,803
Computer specialist	13	3	42,601	127,803
Mathematician	13	1	42,601	42,601
Computer scientist	12	1	35,825	35,825
Computer systems analyst	12	1	35,825	35,825
Computer specialist	11	1	29,891	29,891
Technician	11	1	29,891	29,891
Administrative/technical support	9	3	24,704	74,112
Secretary	5	2	17,937	35,874
Total		24		977,853
Less lapse.......25%		(6)		(245,853)
Total full-time permanent		18		732,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	18
Authorized Positions:	
Full-time permanent	24

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Computer sciences and technology	Pos./BA	123	$9,919	159	$13,419	36	$3,500
	FTE/Obl.	137	9,919	164	13,419	27	3,500
Integrated services digital network (ISDN) technology	Pos./BA			12	1,000	12	1,000
	FTE/Obl.			9	1,000	9	1,000

Integrated Services Digital Network (ISDN) Technology - This request will accelerate the development of emerging Integrated Services Digital Network (ISDN) standards and achieve agreements on the implementation of specifications for the highest priority telecommunication products and services used by industry and the U.S. Government.

The Competitive Issue

The U.S. is an enormous producer, transmitter and consumer of information. Information technology is a pervasive component in such industry segments as manufacturing, banking, public telephone networks, office automation, and consumer electronics. Modernization of the telecommunications industry through the development of ISDN technology is the key to improving the productivity of U.S industry, education, research, engineering, and the service sector. ISDN will enable voice, data and image signals to be sent and received with the same equipment over digital telephone networks. The widespread application of ISDN will stimulate new industries necessary to achieve the interconnection of residential, industrial, governmental, educational, and health care facilities.

Europe and Japan are ahead of the U.S. in the deployment of ISDN. The Europeans are planning to develop a transparent interoperable ISDN across Europe by 1992. The Japanese have deployed baseband ISDN in some cities and are known to have advanced their research on broadband ISDN. The country or region whose standards are adopted, starts with a large competitive advantage by virtue of having their technologies codified in the specifications. There is an urgent need for uniform standards and implementation agreements to allow U.S. industry to become competitive.

The telephone and telegraph equipment industry sells about $16 billion dollars worth of equipment per year and employs more than 100,000 workers. Together these two are smaller than the telecommunications services segment which has nearly $150 billion in operating revenues and employs more than 900,000 workers. The industry is also diverse, with local services provided by seven regional and thousands of small telephone companies, cable operators, and long distance carriers.

The Technology

ISDN promises to change how telephones are used and to speed up the movement of information around the world. Recent technological advances and engineering developments in optical systems and digital switching devices are making ISDN commercially attractive.

The breakup of the Bell System in the United States and the entry of domestic and foreign competition has meant that no single company can establish de facto interface standards. Successful operation of a global digital telecommunications system depends largely on the development of and agreement on transmission media and protocols necessary to ensure end-to-end compatibility for customers. Standards for ISDN are now starting to emerge. These telecommunication standards are incomplete and will require implementation agreements and conformance tests before wide-spread commercialization of new products can be accomplished.

With the divestiture of AT&T, getting vendors and carriers to agree on the same interpretation of the standard or consistent implementation will be extremely difficult to achieve.

The Role of NIST in the Technology

NIST has a track record of sponsoring and participating in open forums such as the North American Integrated Services Digital Network (ISDN) Users' Forum and the NIST Workshop for Implementors of Open Systems Interconnection (OSI). These forums lead to implementation agreements that enable interoperable products and services to be developed. NIST is the trusted, neutral organization that is able to bring computer manufacturers, service providers, and system integrators together to develop technical agreements on ISDN.

NIST's Response to Industry Needs

As an indication of the private sector's interest in NIST support, NYNEX and BELLCORE have signed memoranda of understanding with NIST to work toward the development of the needed tests. NIST has obtained and will continue to obtain assistance-in-kind from industrial consortia related to this effort. As the program grows, industry will be further encouraged to participate.

The most critical measurement need in the systems area is for test protocols and measurement capability for ISDN. Prototype systems are available, but widespread application of this technology requires the devolopment of standard high speed protocols, implementation agreements, and tests.

NIST will participate in the development of selected ISDN standards where NIST efforts can serve to accelerate the development of critically needed standards. Once standards are developed and agreement is reached on consistent implementation specifications, vendors/carriers need to correctly implement the standards in products and services.

Economic Impacts

Benefits of ISDN standards are realized by service providers, such as the regional Bell operating companies, applications software developers, and system integrators. Users of their services are expected to experience significant productivity gains due to better integration of voice, data, and video using digital communications.

The deployment of ISDN has the potential to reduce user costs for telecommunication services and will make possible a new spectrum of information services that will accelerate productivity and improve U.S. competitiveness. Since the Federal Government is the largest user of the component ISDN services, they can be expected to be the largest user of ISDN services and the largest beneficiary of ISDN benefits.

The large U.S. ISDN market consists of millions of customer premise equipment and thousands of telephone companies' central offices which are of strong interest to the foreign suppliers who currently enjoy an edge in the ISDN area. This program will provide U.S. industry with appropriate tools to become and remain competitive in this area.

NIST Output

- o Development and instrumentation of selected standard high speed protocols, implementation agreements, and test specifications.
- o Work with industry, users, service developers and academia to provide measurement techniques, prototypes, agreements, and tests to ensure a national transparent interoperable ISDN in North America.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology
Program Change: Integrated Services Digital Network (ISDN) Technology

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	$330
11.9	Total personnel compensation	330
12.1	Civilian personnel benefits	89
21	Travel and transportation of persons	41
22	Transportation of things	26
23.3	Communications, utilities and miscellaneous charges	118
24	Printing and reproduction	6
25	Other services	272
26	Supplies and materials	68
31	Equipment	50
99	Direct obligations	1,000

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology
Program Change: Integrated Services Digital Network (ISDN) Technology

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	15	1	$59,216	$59,216
Computer scientist	14	1	50,341	50,341
Computer scientist	13	2	42,601	85,202
Mathematician	13	1	42,601	42,601
Computer scientist	12	1	35,825	35,825
Computer specialist	12	1	35,825	35,825
Computer scientist	11	1	29,891	29,891
Electronics engineer	11	1	34,363	34,363
Computer technician	9	1	24,704	24,704
Administrative/technical support	9	1	24,704	24,704
Secretary	5	1	17,937	17,937
Total		12		440,609
Less lapse 25%		(3)		(110,609)
Total full-time permanent		9		330,000

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	9
Authorized Positions:	
Full-time permanent	12

Computer Sciences and Technology
Reimbursable Program by Source of Support
(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$478	$475	$325
Army	342	683	150
Navy	955	622	1,010
Other	6,750	9,947	9,175
Subtotal, Department of Defense	8,525	11,727	10,660
Department of Commerce	280	101	375
Department of Justice	247	275	275
Department of Energy	160	34	50
General Services Administration	333	84	100
Department of Health and Human Services	429	394	350
Department of Housing and Urban Development	100	0	0
Department of Interior	78	11	0
National Aeronautics and Space Administration	19	130	225
Department of State	61	10	0
Department of Treasury	1,724	1,397	1,100
Veterans Administration	65	50	200
Other	25	274	100
Total, Other Agency	12,046	14,487	13,435
Standard Reference Materials (SRM)	18	18	18
Technical and Advisory Services	1,305	1,305	1,305
Total, Reimbursable Program	13,369	15,810	14,758

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Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial technology services	Pos./BA..	93	$22,420	99	$25,976	97	$26,086	90	$22,136	(7)	($3,950)
	FTE/Obl..	100	15,156	104	37,502	104	26,086	97	22,136	(7)	(3,950)

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services

	1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial technology services										
WCF transfers........	0	0	0	0	0	0	0	0	0	0
Reimbursable FTE/Obl.......	111	$13,121	111	$13,909	111	$14,744	111	$14,744	0	0
Total......	111	13,121	111	13,909	111	14,744	111	14,744	0	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
INDUSTRIAL TECHNOLOGY SERVICES

Goals and Objectives

Goal.

The goal of this subactivity is to improve the competitiveness of U.S. industry by providing services to assist U.S. industry develop technologies and procedures to enhance productivity and technological performance; to transfer modern automated manufacturing technology to small and medium-sized companies; to help accelerate the commercialization of technological innovations and refine manufacturing technologies; and to improve the use of technology by small and medium-sized U.S. industrial firms. This subactivity supports the major DoC goals of (1) promoting the development and application of science and technology in U.S. industries; (2) increasing the acceptance of international technical standards based on U.S. technology; (3) promoting private sector capital formation, job creation, and new and expanding markets; and (4) increasing America's competitiveness in the work economy.

Objectives:

- Provide physical measurement services, Standard Reference Materials, and critically evaluated data to meet new demands associated with process control and quality assurance requirements of high technology industries, and other industrial sectors.
- Develop and transfer the technical basis for the uniform administration of an equitable weights and measures system by state and local jurisdictions.
- Provide technical assistance to public and private sector standardization and legal metrology activities.
- Support NIST-Regional Manufacturing Technology Centers and assist them, when appropriate, with the expertise and capability in other Federal laboratories.
- Assist in the adoption and transfer of modern automated manufacturing technology and techniques, including those developed at NIST, by small and medium-sized manufacturing firms throughout the U.S.
- Provide support for R&D consortia involved in the development of generic technologies that show substantial commercial potential.

Base Program

We, as a Nation, need to capitalize on new technologies developed in the U.S. scientific and technical community at a faster rate. Now, more than ever, the NIST measurement service programs and activities under this subactivity will be vital to our Nation's effort to improve the technical capabilities in and enhance the competitive edge of American industry. Programs under this subactivity transfer NIST measurement techniques, standards, and data to the industrial, academic, and government community. Also included are activities related to the development and implementation of policy guidelines related to national and international standardization development activities and commercial measurement through cooperative efforts with domestic, foreign, and international treaty and non-treaty organizations, Federal, state, and local government, businesses, and industry concerned with standardization and related measurement activities.

The manufacturing technology centers established under this subactivity offer direct personal "hands on" assistance to small and medium-sized U.S. manufacturers in automation and other advanced manufacturing techniques and technology which are essential to improving their productivity and competitiveness. At the same time the centers will act as a continuing conduit of NIST research results as well as a direct source of new technologies themselves. The programmatic requirement for non-Federal matching funds and an assurance of continuation when funding for each center expires ensures that the NIST investment is well leveraged and that the long-term commitment to improved manufacturing on the part of the center sponsored is serious.

In its first year of operation the Advanced Technology Program (ATP) will focus on gaining operational experience in stimulating the formation of industrial consortia to conduct research and development in generic technologies with broad scientific and industrial significance. Experience will also be gained in exercising the new funding authority assigned to NIST and a variety of related issues such as patent rights, royalties and leveraging the Government's investment in research and development.

The ATP program will focus on funding research in generic, pre-competitive technologies. NIST plans to define a single broad topic of strategic technological interest to the U.S. This would allow for a variety of innovative proposals and at the same time would allow the program to focus its efforts and avoid diluting its resources on a wide array of technological topics. NIST expects to fund between five and ten different proposals in the first year and to confine its pilot efforts to joint R&D ventures. Based on the first year of experience NIST will be in a better position to expand its horizons in terms of topics, types of support, etc.

The State Technology Extension Program, funded by Congress in 1990, provides technical information and assistance to existing or planned state technology development programs. The program provides financial assistance through cooperative agreements with states willing to increase their own funding for technology extension activities by an equal amount in order to improve federal technology transfer.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial technology services	Pos./BA	97	$26,086	90	$22,136	(7)	($3,950)
	FTE/Obl.	104	26,086	97	22,136	(7)	(3,950)
Manufacturing technology centers	Pos./BA	8	7,500	5	5,000	(3)	(2,500)
	FTE/Obl.	8	7,500	5	5,000	(3)	(2,500)

Manufacturing Technology Centers - A decrease of $2,500,000 and 3 positions is proposed for this program. NIST has received funding to establish the Regional Centers for the Transfer of Manufacturing Technology in fiscal year 1988, 1989 and 1990. The $5,000,000 level of funding requested for fiscal year 1991 will continue the program.

A decrease of 3 positions reflects charging of personnel originally involved in program start-up to the management of other Technology Services programs.

National Institute of Standards and Technology
Scientific and Technical Research and Services

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$14	$8	$12	$12
Pamphlets	17	10	25	25
Audiovisuals	4	23	0	0
Total	35	41	37	37

The National Institute of Standards and Technology produces only one periodical - The Journal of Research. The Journal of Research of the National Institute of Standards and Technology, issued six times a year, reports NIST research and development in those disciplines of the physical and engineering sciences in which NIST is active (physics, chemistry, engineering, mathematics, and computer sciences).

The increase in pamphlet costs in fiscal years 1990 and 1991 is the result of continuing the revision of existing information to reflect a new organizational name and additional programmatic responsibilities assigned by the Omnibus Trade and Competitiveness Act.

Working Capital Fund, National Institute of Standards and Technology (NIST)

The operations of the NIST Working Capital Fund are reported in a program and financing schedule printed in the President's budget, as well as reflected in the reimbursable amounts throughout this budget. The fund finances the initial costs of work performed by NIST and is reimbursed by applicable appropriations and advances or reimbursements from other agencies. A detailed cost accounting system is used to insure that the actual cost of work performed for each job or task is recorded and identified with the appropriate source of financing. In addition to its function as a revolving fund, the Working Capital Fund is also used to handle annual and sick leave on an accrued basis, to acquire equipment as an investment to be recovered through depreciation charges to programs, to distribute indirect costs to programs as overhead, to carry the recoverable costs associated with the production of Standard Reference Materials, and to carry supply inventories until issued for program use.

The schedule below summarizes the total NIST program according to the source of financing. The narrative and tables following contain information concerning the activities of the fund and future investment plans.

Summary of Total NIST Program
(Obligations in thousands)

	FY 1989			FY 1990			FY 1991			
Source and Use of Funds Spent	Perm. Pos. 1/	FTE	Oblig.	Perm. Pos. 1/	FTE	Oblig.	Perm. Pos. 1/	FTE	Oblig.	Appropriation Requested
Direct funding										
Scientific and technical research services	1,564	1,675	$149,919	1,556	1,681	$180,455	1,835	1,812	$188,636	$198,408
Gifts and bequests	...	...	16	...	...	16	...	...	16	...
Total, direct appropriations	1,564	1,675	149,935	1,556	1,681	180,471	1,835	1,812	188,652	198,408
Reimbursable Funding and WCF Investments										
Research, development and supporting services - Federal Government	995	1,055	98,481	1,006	1,064	109,061	1,006	1,064	110,558	
Calibrations and tests, technical and advisory services:										
Federal Government	27	29	2,500	26	28	2,673	26	28	2,824	
Public and non-Federal Government	219	232	20,070	212	224	21,449	212	224	22,665	
Subtotal, calibrations and tests, technical and advisory services	246	261	22,570	238	252	24,122	238	252	25,489	
Standard reference materials (SRM):										
Sales:										
Government	5	5	353	5	5	383	5	5	393	
Public	86	91	6,493	86	91	7,047	86	91	7,218	
Subtotal, sales	91	96	6,846	91	96	7,430	91	96	7,611	
Investment of WCF in production materials	...	...	...	...	...	...	...	...	...	
Subtotal, SRM	91	96	6,846	91	96	7,430	91	96	7,611	
WCF investments and operating adjustments	...	...	793	...	...	539	...	...	9,772	
Total, WCF	1,332	1,412	128,690	1,335	1,412	141,152	1,335	1,412	153,430	
Total, NIST program	2,896	3,087	278,625	2,891	3,093	321,623	3,170	3,224	342,082	

1/ Most NIST Scientists and engineers are not engaged solely on one research project. An individual may divide his time between two or more projects financed by different sources. Also, salary costs of many staff members are charged to an overhead account and subsequently prorated to all directly funded projects. For these reasons, it is not possible to report employment directly for any source of financing. The above are statistically derived numbers based on the estimated work years distribution for NIST programs.

Working Capital Fund, National Institute of Standards and Technology (NIST)

The operations of the NIST Working Capital Fund are reported in a program and financing schedule printed in the President's budget, as well as reflected in the reimbursable amounts throughout this budget. The fund finances the initial costs of work performed by NIST and is reimbursed by applicable appropriations and advances or reimbursements from other agencies. A detailed cost accounting system is used to insure that the actual cost of work performed for each job or task is recorded and identified with the appropriate source of financing. In addition to its function as a revolving fund, the Working Capital Fund is also used to handle annual and sick leave on an accrued basis, to acquire equipment as an investment to be recovered through depreciation charges to programs, to distribute indirect costs to programs as overhead, to carry the recoverable costs associated with the production of Standard Reference Materials, and to carry supply inventories until issued for program use.

The schedule below summarizes the total NIST program according to the source of financing. The narrative and tables following contain information concerning the activities of the fund and future investment plans.

Summary of Total NIST Program
(Obligations in thousands)

Source and Use of Funds Spent	FY 1989			FY 1990			FY 1991			
Direct funding	Perm. Pos. 1/	FTE	Oblig.	Perm. Pos. 1/	FTE	Oblig.	Perm. Pos. 1/	FTE	Oblig.	Appropri-ation Requested
Scientific and technical research services	1,564	1,675	$149,919	1,556	1,681	$180,455	1,835	1,812	$188,636	$198,408
Gifts and bequests	...	...	16	...	...	16	...	...	16	...
Total, direct appropriations	1,564	1,675	149,935	1,556	1,681	180,471	1,835	1,812	188,652	198,408
Reimbursable Funding and WCF Investments										
Research, development and supporting services - Federal Government	995	1,055	98,481	1,006	1,064	109,061	1,006	1,064	110,558	
Calibrations and tests, technical and advisory services:										
Federal Government	27	29	2,500	26	28	2,673	26	28	2,824	
Public and non-Federal Government	219	232	20,070	212	224	21,449	212	224	22,665	
Subtotal, calibrations and tests, technical and advisory services	246	261	22,570	238	252	24,122	238	252	25,489	
Standard reference materials (SRM):										
Sales:										
Government	5	5	353	5	5	383	5	5	393	
Public	86	91	6,493	86	91	7,047	86	91	7,218	
Subtotal, sales	91	96	6,846	91	96	7,430	91	96	7,611	
Investment of WCF in production materials	...	...	...	...	...	...	...	...	...	
Subtotal, SRM	91	96	6,846	91	96	7,430	91	96	7,611	
WCF investments and operating adjustments	...	...	793	...	...	539	...	...	9,772	
Total, WCF	1,332	1,412	128,690	1,335	1,412	141,152	1,335	1,412	153,430	
Total, NIST program	2,896	3,087	278,625	2,891	3,093	321,623	3,170	3,224	342,082	

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Mr. Smith. Do you have a statement?

Opening Statement

Mr. Lyons. Yes, sir, I do. We have submitted a formal written statement for the record. I would like to summarize. I would like to ask you how we should proceed. There are a couple of paragraphs I would like to read.

Thank you, Mr. Chairman.

I am pleased to appear before you today to request appropriations for the National Institute of Standards and Technology for fiscal year 1991.

This year the President is requesting $198.4 million for the National Institute of Standards and Technology, an increase of $36.6 million over the appropriation for fiscal year 1990. Of the total appropriation, $15 million will be used for extramural activities and $183.4 million to strengthen our traditional core research programs.

At a time when our nation's industries are facing the critical challenges of world wide economic competition, NIST has been given responsibilities to help increase the competitiveness of United States industry. This budget request addresses important technical activities needed for NIST to fulfill these responsibilities.

The Omnibus Trade Act of 1988 states that NIST's first function is "to assist industry in the development of technology, needed to improve product quality, to modernize manufacturing processes, to ensure product reliability, and to facilitate rapid commercialization of products based on new scientific discoveries."

The second function is the support of the national system of measurements. We have set ourselves three broad goals in carrying out both these functions: first, the support of United States industry; second, continued attention to public health and safety; and third, support of the scientific and engineering research community through fundamental research.

The Omnibus Trade Act calls for both laboratory work at NIST and extramural support efforts. The latter includes the Center for Integrated Design and Non-Destructive Evaluation and Manufacturing, the Regional Centers for the Transfer of Manufacturing Technology, the Advanced Technology Program, and the State Technology Extension Program.

We believe that the two aspects of the NIST program are mutually reinforcing; that is, the one is strengthened by the other. Thus, our laboratory work will be better directed to industrial problems by the connections and contacts achieved in the extramural work, and we shall be more able to support the work in the extramural programs by dint of technical understanding derived from our laboratory programs. The conclusion I draw from this is that the two aspects of our programs need to go forward together and that it is not desirable to fund one at the expense of the other.

I am pleased to present to you the President's budget for NIST for fiscal year 1991. The budget proposes an increase of some 23 percent for NIST programs, the largest increase in recent memory. Not only does the budget have strong support for the various advanced technologies in our in-house laboratory work, but it also shows agreement in principle for two of the new extramural programs, the Regional Centers for the Transfer of Manufacturing Technology and the Advanced Technology Program.

The budget has $5 million for the Regional Centers. The President has also approved $10 million for the Advanced Technology Program.

Mr. Chairman, that was the opening I wanted to read this morning. I have summarized here and can go through, if you wish, in a brief manner, the rest of my formal statement. Or I can stop and we can get to questions.

[The statement of Dr. Lyons follows:]

U.S. DEPARTMENT OF COMMERCE
STATEMENT OF JOHN W. LYONS, DIRECTOR
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE
JUSTICE, STATE, THE JUDICIARY, AND RELATED AGENCIES
MARCH 2, 1990

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today to request appropriations for the National Institute of Standards and Technology (NIST) for the fiscal year 1991. This year the President is requesting $198.4 million for the National Institute of Standards and Technology, an increase of $36.6 million over the appropriation for FY 1990. Of the total appropriation, $15 million will be used for extramural activities and $183.4 million to strengthen our traditional core research programs.

At a time when our Nation's industries are facing the critical challenges of world-wide economic competition, NIST has been given responsibilities to help increase the competitiveness of U.S. industry. This budget request addresses important technical activities needed for NIST to fulfill these responsibilities. The Omnibus Trade Act of 1988 states that NIST's first function is "to assist industry in the development of technology ... needed to improve product quality, to modernize manufacturing processes, to ensure product reliability, ... and to facilitate rapid commercialization ... of products based on new scientific discoveries..."

The second function is the support of the national system of measurements. We have set ourselves three broad goals in carrying out both these functions: first, the support of U.S. industry, second, continued attention to public health and safety, and, third, support of the scientific and engineering research community through fundamental research. The Omnibus Trade Act calls for both laboratory work at NIST and extramural support efforts. The latter includes the Center for Integrated Design and Non-Destructive Evaluation and Manufacturing, the Regional Centers for the Transfer of Manufacturing Technology, the Advanced Technology Program, and the State Technology Extension Program. We believe that the two aspects of the NIST program are mutually reinforcing; that is, the one is strengthened by the other. Thus, our laboratory work will be better directed to industrial problems by the connections and contacts achieved in the extramural work, and we shall be more able to support the work in the extramural programs by dint of technical understanding derived from our laboratory programs. The conclusion I draw from this is that the two aspects of our programs need to go forward together and that it is not desirable to fund one at the expense of the other.

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NIST does two kinds of technical work in support of industry: supporting services useful to industry at any stage of the commercialization process, and product and process studies. The supporting services include reference data, reference materials, and new measurement techniques. These services are useful at any stage in commercialization from characterizing new products or designing a replacement unit operation in a mature process. NIST has a long and successful tradition in supplying these services.

Working Capital Fund Summaries

(Dollar amounts in thousands)

	Available for Operations and Investment	Investment in Other Assets	Total
Appropriated capital	$5,000	...	$5,000
Transfers from appropriations:			
"Scientific and Technical Research and Services"	64,738	...	64,738
"Construction of Facilities"	3,273	...	3,273
Replacement Surcharge Capital	4,536	...	4,536
Land and buildings	...	$83,998	83,998
Donated equipment, not subject to depreciation	...	6,053	6,053
Donated precious stones and metals	...	4,627	4,627
Inventories and equipment - operating adjustments	(417)	...	(417)
Total, September 30, 1989	$77,130	$94,678	$171,808

As the above table indicates, the total capital which had been available for operations and investment in materials inventories and depreciable equipment is $77,130,000. The status as of September 30, 1989 of that portion of the total capital of the Fund is as follows:

		(In thousands)
Invested In: General Equipment		$59,995
Supply Inventories		1,260
Standard Reference Materials		13,655
Irrigation Ditch Stock		6
Current assets:		
Cash	53,039	
Accounts receivable	24,955	
Advances and other assets	199	
Current assets	78,193	
Deduct current liabilities:		
Leave liability	12,243	
Advances from other agencies	35,980	
Other liabilities	27,756	
Current liabilities	75,979	
Net working capital		2,214
Total		$77,130

Future investment plans

Following is a summary of the NIST's plans for further Working Capital Fund investment in 1990 and 1991.

	(Dollar amounts in thousands) 1990 Estimate	(Dollar amounts in thousands) 1991 Estimate
Source of Investment Funds:		
Net working capital	$2,214	...
Add: Leave reserve	11,169	$11,615
Adjusted net working capital, start of year	13,383	11,615
Increases:		
Transfer from Scientific and Technical Research and Services appropriation	539	9,772
Depreciation/replacement surcharge on general purpose equipment	16,000	16,842
Cost of Standard Reference Materials sold	3,703	3,851
Total source of funds	33,625	42,080
Use of Investment Funds:		
Production of Standard Reference Materials (SRM's)	3,703	3,851
Equipment acquisitions during current year	16,539	26,614
Payment of prior year equipment acquisitions and SRM work-in-process	13,383	11,615
Total use of funds	$33,625	$42,080

The amounts to be invested in fiscal years 1990 and 1991 are for the purchase of depreciable equipment and the production of Standard Reference Materials. These investments will be financed by a transfer of $539,000 in 1990 and $9,772,000 in 1991 from the Scientific and Technical Research and Services appropriation, and through the recovery of depreciation and replacement surcharges and the costs of Standard Reference Materials that are sold.

Total NIST Reimbursable

Reimbursable Program by Source of Support

(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$13,163	$14,602	$13,762
Army	10,253	10,137	$10,026
Navy	16,717	17,962	19,146
Other	16,016	19,571	19,326
Subtotal, Department of Defense	56,149	62,272	62,260
Department of Commerce	5,836	5,786	6,255
Consumer Product Safety Commission	99	30	30
Department of Justice	1,931	2,069	2,176
Federal Emergency Management Agency	391	435	432
Department of Energy	11,860	13,603	14,452
Environmental Protection Agency	1,432	1,549	1,537
General Services Administration	1,592	1,135	1,214
Department of Health and Human Services	2,180	2,289	2,354
Department of Housing and Urban Development	568	211	526
Department of Interior	651	1,567	942
National Science Foundation	937	1,384	1,495
National Aeronautics and Space Administration	6,424	7,304	7,776
Department of State	117	102	98
Nuclear Regulatory Commission	1,535	1,099	1,048
Department of Transportation	945	967	960
Department of Treasury	2,341	2,152	1,901
Veterans Administration	336	337	505
Other	3,157	4,770	4,597
Total, Other Agency	98,481	109,061	110,558
Calibrations and Test	6,845	7,268	7,708
Standard Reference Materials (SRM)	6,846	7,430	7,611
Technical and Advisory Services	15,725	16,854	17,781
WCF Investment	793	539	9,772
Total, Reimbursable Program	128,690	141,152	153,430

The product and process work exemplified by our work in advanced materials and factory automation is more difficult to manage. I believe that this work should be generic and precompetitive and not encroach on the proprietary aspects of commercialization. I say this because industry can best determine what its markets need, and because the cost to work far down the development time line rises exponentially. NIST cannot afford to develop specific products and processes, nor should it. By staying in the precompetitive areas NIST will command very high leverage - as it has traditionally - and thereby be able to be involved in many different technologies at once.

Unfortunately, NIST has not been able to keep pace with industry's needs. While industry has reacted to competitive pressures by increasing R&D spending by 82% over the last 15 years, Federal Government funding for R&D has increased 57%. The majority of the Government investment has been in defense-related technology while civilian R&D funding has lagged dramatically. NIST's efforts to respond to the competitiveness crisis have progressed despite near zero growth in constant dollars in resources for in-house research over the past 15 years.

This budget represents a major step in assuring that NIST will be responsive to the needs of industry by bolstering our core research programs and the necessary support activities as well as the technology transfer programs undertaken through extramural cooperative agreements.

At this time, let me take a moment to speak of some of these extramural programs. In 1989 we received $7.5 million to fund a cooperative agreement with the University of Iowa's Center for Integrated Design and Non-Destructive Evaluation and Manufacturing for a three-year period from January 1, 1989 through December 31, 1991. The purpose is to focus on the research and development necessary to define and implement a new integrated design and manufacturing technology in which product quality control and process monitoring techniques can be incorporated into product design. Five technical thrusts have been established: (1) CAD design, (2) NDE/POD models, (3) materials and processes, (4) reliability and (5) integration. An award of $2.6 million was made in FY 1989 and work has been initiated in all five areas.

Three other programs are the Regional Centers for the Transfer of Manufacturing Technology, the Advanced Technology Program, and the State Technology Extension Services Program. I would like to comment on the status of these activities as well as the Administration's plans in these areas for FY 1991.

Three Manufacturing Technology Centers were selected in December 1988. The Center Directors now meet with NIST Program Management on a monthly basis to develop strategies and to resolve issues of common concern. Since each Center differs from the others in its local support base, their performance represents an experimental model for this type of technology transfer. The Northeast Center at Rensselaer Polytechnic Institute has completed 6 and has 34 current projects involving the research and development of factory automation technology which is very similar to the work at NIST. We expect that advanced concepts in manufacturing technology will be useful to small business in this region and that the New York Industrial Innovation Extension Service will effectively interact with the Center.

The Great Lakes Center in Cleveland has contacted over 1200 companies and has initiated over 150 projects. This Center has close relations with large industries in the area and is striving to serve the many small industries that are concentrated across the Midwest. The State of Ohio has granted the Center $2.5 million which will be used to leverage the acquisition of over $7.0 million in capital equipment.

The Southeast Manufacturing Technology Center at the University of South Carolina is working with the State's technical colleges that were established to cooperate with industry. The Center has obtained a commitment of $2.45 million from South Carolina in 1990, and has established linkages with Georgia Tech., Clemson, and Oak Ridge National Laboratory as additional sources of R&D assistance. The Southeast Center is working toward the development of computer based methods for tracking supplier-vendor links and for manufacturing companies to evaluate themselves.

Although it is early in the program, these first Centers have made solid progress. The President has requested $5 million to support these Centers as we proceed to help them continue their efforts, and to evaluate their progress.

The Advanced Technology Program is designed to encourage industry-led joint research and development in promising technologies. A draft of the Federal Register notice describing this program is in the review process. After its publication, the application process will begin. If all goes as planned, the first awards will be granted in this fiscal year. The ATP was appropriated $10 million in FY 1990, and the President is requesting $10 million in FY 1991.

The Boehlert/Rockefeller State Technology Extension Services Program was appropriated $1.3 million in FY 1990. The Institute proposes to use these funds to make grants to the states to demonstrate methods of transferring Federal technology to state businesses. This program will provide support to increase the effectiveness of the Regional Manufacturing Technology Centers and to disseminate information to the states in the form of brochures, seminars, and workshops. These activities promise to build on the rapid increase in technology support programs which are being developed by the states themselves to help their own businesses improve productivity and manufacturing quality. We plan to work closely with the Office of Technology Policy to ensure that the program complements the activities of the Clearinghouse for State and Local Initiatives on Productivity, Technology and Innovation, which is run by the Office of the Assistant Secretary for Technology Policy. The Institute will capitalize on the relationships developed with the states and continue to contribute expertise to the states through ongoing NIST activities in technology transfer. Consequently, no funds are requested in the President's 1991 budget for this program. We expect that strong Federal-State technology transfer arrangements will continue as a result of the relationships established between NIST and the states in 1990; other ongoing

NIST technology transfer activities; and the activities of the Clearinghouse.

Now I want to treat the in-house efforts at NIST. To ensure that NIST fulfills its potential to leverage the commercialization of new technological developments, we are proposing increases for critical areas of institutional health and four competitiveness areas which address major technological issues. In the area of institutional health, we are requesting increases to upgrade the NIST scientific computer and to begin to repair and upgrade aging facilities at our Boulder, CO and Gaithersburg, MD laboratories. Increases for technology related research are requested for standards and information for quality improvement, information technologies, electronic technology, and intelligent machines and processes. I would now like to discuss each of these budget areas in some detail.

PROGRAM INCREASES

In the area of Institutional Health, we are requesting increases of 26 positions and $3.1 million for upgrading our scientific computer and $1.0 million to retrofit the NIST facilities. The increase for the scientific computer will enable NIST to respond to the needs of the scientific staff for more computing power, expanded capacity, greater flexibility, and enhanced software support to meet rapidly growing computational requirements which are of critical importance to NIST's mission.

The retrofit of NIST Facilities will support the safety, system capacity, and obsolescence requirements of the NIST facilities at Gaithersburg, MD, and Boulder, CO, which are 25 and 35 years old, respectively. The requested $1 million plus an additional $0.7 million to be collected from reimbursable customers would allow NIST to begin to address the most critical priorities.

Increases of 291 positions and $29.7 million are requested for core research programs aimed at four competitiveness areas which are based on changing technology. Each of these initiatives emphasizes measurement-related research, quality assurance and process control.

In the area of Standards and Information for Quality Improvement we are requesting 69 positions and $6.6 million. Quality and competitiveness are becoming the determining factor of long-term economic growth and the survival of U.S. industries in the international market. Quality products and processes depend on generic technologies such as measurements, measurement methods, test methods, calibrations, and evaluated data. NIST proposes to expand its program to support measurement research and services that are vital to improving process control and quality assurance in chemical-measurement-intensive industries in general, and the biochemical manufacturing in particular.

This increase includes Chemical Measurements and Standards for 40 positions and $4.3 million - Chemical compositional measurement technology is used in virtually all industrial sectors and private/public testing laboratories. An estimated 250 million analytical chemical measurements are made each day, costing $50 billion per year. Even small improvements in chemical measurement technology could have an enormous impact, raising quality levels and competitiveness across a broad spectrum of U.S. industry. NIST proposes to expand its program in Chemical Measurements and Standards by developing new chemical separation methods, incorporating new mathematical tools and automation systems to improve accuracy and throughput of industrial chemical analyses, and developing state-of-the-art methods for measuring elements and molecules.

Also included is Bioprocess Engineering for 29 positions and $2.3 million. Although the U.S. currently leads the world in fundamental biochemical laboratory research, we are behind in bringing this technology to the marketplace. U.S. industry can use NIST's interdisciplinary measurement expertise to help reduce industry's dependence on expensive and time consuming pilot plant studies. With this increase, NIST will develop the tools to accelerate the conversion of innovative laboratory-scale advances to commercialization of biochemical products and thus secure a significant share of the world market.

In the area of Information Technologies we are requesting 86 positions and $9.0 million to develop measurement support for the next generation of information and communication systems. The U.S. information and communication industry is currently robust and competitive but it faces significant foreign competition from Japan, Europe, and Canada. Presently, industry is unable to fully and quickly develop the measurement techniques and standards needed to assure quality and compatibility because individual private sector entities lack the impartiality and specialized expertise in measurement science. NIST proposes to help industry through expanded programs focused on fiber optic support components, digital network services, and computer security.

Individual initiatives in this area include Lightwave Measurement Technology for 50 positions and $5.5 million. Japan has reached a par with the U.S. in fiber technology and is ahead and increasing its lead in supporting opto-electronic components. Industry needs NIST's objectivity and generic measurement expertise to develop measurement methods which will be adopted by domestic companies and international customers. This increase will continue the expansion of measurement support for components of lightwave systems such as light sources, modulators, and optical integrated circuits. The current lack of standardization in this field inhibits the emergence of competitive opto-electronic components.

Also included is Integrated Services Digital Network (ISDN) for 12 positions and $1.0 million. Networking of data, voice, and images provides specific segments of the U.S. service economy a tremendous advantage in the marketplace, but only the largest of companies can afford to develop such digital networks. NIST can provide unbiased leadership in bringing computer manufacturers, service providers, and system integrators together to develop technical agreements on ISDN. NIST's technical role is the development of the needed standard high speed protocols, implementation agreements and tests that will accelerate the introduction of ISDN into commercial products and will improve our international competitiveness.

The last initiative in this area is for 24 positions and $2.5 million for computer security. The Computer Security Act of 1987 (P.L. 100-235) assigned responsibility to NIST for developing standards and guidelines for non-defense computer security throughout the Federal government. Communications networks which link computer systems are vulnerable to disclosure, modification, or destruction. With this increase, NIST will undertake a laboratory-based program to assure the cost-effective security and privacy of sensitive information and protection from viruses in civilian Federal computer systems.

The third major technology area for which we are requesting 67 positions and $6.8 million is Electronic Technology. This area provides technical support services for the electronics industry for new generations of semiconductor, superconductor, and atomic scale devices. A strong electronics industry is essential for maintaining a successful competitive position for any country, including the United States. Japan is our major competitor: In the semiconductor area, Japan is gaining market share at U.S. expense. In high temperature superconductors, the race for the future market is even. In atomic scale devices, the opportunity exists for the U.S. to establish itself first in a future industry. NIST is the only source of the absolute accuracy and special metrological expertise which the industry needs for measuring properties of starting materials, evaluating successive processing steps applied to those materials, and measuring the characteristics of the finished product.

The first initiative in the area of Electronic Technology is Advanced Semiconductors for which we are requesting 41 positions and $3.9 million. This increase will expand the support needed by this measurement-intensive industry. Industry typically addresses measurement problems to the extent necessary to solve an immediate problem. NIST will develop new generic measurement methods needed to serve the broad industrial base over the long term. These efforts will lead to the next generation of integrated circuits with dimensional features below one micrometer. This initiative will provide the technical basis for voluntary standards to facilitate acceptance and sale of U.S. products in domestic and international markets.

We are also requesting 17 positions and $1.9 million for High Temperature Superconductors which will expand measurement support to industry needed to develop products utilizing the new superconductors. The discovery of superconductivity at temperatures above that of liquid nitrogen has stimulated intense international competition for lucrative and diverse new markets for superconducting devices. Obstacles to commercialization of these devices include brittleness, difficulty in fabrication, and poor current carrying capacity. U.S. industry needs NIST's special competence in developing and gaining acceptance of advanced measurement practices to overcome these obstacles.

The third initiative in the area of Electronic Technology, is for Atomic Scale Electronics. We are requesting 9 positions and $1.0 million. In order to increase the speed of data processing and communications, electronic and optical devices have been evolving toward ultra-small, atomic scale systems. Within a decade the ability to reduce the size of integrated circuits will run up against fundamental physical limits. NIST will develop new tests of the fundamental laws of physics at the quantum limits of precision to provide the measurement support needed by industry to develop future generations of microstructure devices based on manipulating individual atoms.

The last major area for which we are seeking increases is Intelligent Machines and Processes. For this area which addresses the fundamental measurement theory and automation that industry needs to control advanced manufacturing and materials processing we are requesting 69 positions and $7.3 million. Successful competition in international markets will demand the development and use of intelligent machines and processes which will produce materials and goods that have higher quality, lower cost, more modern designs, and functional characteristics tailored to meet rapidly changing market demands. Components of an intelligent machine or process include advanced sensors to measure critical product characteristics, computerized knowledge to give instructions, and physical or process manipulators to perform the work. These elements are integrated into a system which corrects itself without human intervention when something starts to go wrong. Technical barriers to full use include ways to represent process knowledge in forms which machines can interpret; advanced sensors for determining the form and properties of a product during production; and measurement technology and standards. NIST proposes to address these technical barriers through an expanded program involving three initiatives, the first of which is:

Intelligent Processing of Materials requiring an increase of 10 positions and $1.3 million. NIST will expand collaborative research with U.S. industry to develop in-process sensors, process models, and the principles of intelligent control needed in the production of materials. A range of disciplines including information technology, nondestructive evaluation, and materials science will be applied to the development of approaches for integration of sensory data, process models, and process control for intelligent processing. The program will develop a range of standards, measurement methods, and testing capabilities for intelligent materials processing.

The second initiative in this area is Intelligent Machines for which we are requesting 49 positions and $5.0 million. This initiative will expand collaborative, interdisciplinary research with industry on the processing of sensory data, the computer representation of product-and-process knowledge, and the intelligent control involved in the production of finished goods. Disciplines such as robotics and information technology will be used in the development of the technology base needed to measure the performance of and establish standards for future generations of intelligent machines. NIST will also spearhead a national plan for the development of standards to enable U.S. industry to design and manufacture products more competitively.

And thirdly, we are requesting 10 positions and $1.0 million for High Performance Composites. Composite materials are an important area of worldwide competition in which the U.S. is no longer a clear leader. Efficient commercialization of composite materials is tied to increased reliability at lower unit cost. The requested increase provides the second increment of funding for the program on high performance composites started by a fiscal year 1988 President's initiative. The inability of current manufacturing techniques to control adequately fiber/matrix adhesion and other interface features is a major barrier for industrial fabrication of reliable composites. Industrial designers need performance data, guidelines for selection of compatible materials and fabrication processes, as well as new and improved techniques for inspection and monitoring of composite properties during production for improved process control and quality assurance.

In addition to programmatic increases, we are requesting adjustments to our base budget of $7.2 million and a decrease of 25 positions. These adjustments include anticipated savings of 25 positions and $641 thousand in fiscal year 1991 resulting from A-76 productivity reviews. Also included are $3.0 million for the additional cost in fiscal year 1991 of the 1990 pay raise, $1.4 million to partially finance the 1991 pay raise for GS and SES employees, $1.3 million for personnel benefits and an extra compensable day, and $2.1 million for inflationary increases in costs of goods and services.

Proposed programmatic decreases total 13 positions and $4.5 million. They are:

- Ignition Studies and Alternative Refrigerants (6 positions and $500 thousand) A decrease of 3 positions and $250 thousand is requested for new fire research on ignition of upholstery. A decrease of 3 positions and $250 thousand is also requested for study of alternative refrigerants. Alternative refrigerants are concerned with the ozone layer and the greenhouse effect. The Department of Commerce role in global warming is coordinated by NOAA. The highest priority work concerning the ignition of upholstery will be completed by the end of fiscal year 1990.

- Industrial Technology Services program (7 positions and $4.0 million) A program reduction of 3 positions and $2,500,000 is requested for the Manufacturing Technology Centers program. A decrease of 1 position and $150,000 is requested for evaluation of non-energy related inventions. A decrease of 3 positions and $1,300,000 is requested for the State Extension service program.

Thank you for the opportunity to appear before you today, Mr. Chairman. I shall be glad to answer any questions you or other subcommittee members may have.

NIST PROGRAM DECREASES FOR EXTRAMURAL PROGRAMS

Mr. SMITH. I notice you said we should go forward with the core programs and the extramural programs, and one should not be at the expense of the other. However, you have a $4 million reduction below last year's appropriations for last year's programs. Doesn't that sort of look like one is funded at the expense of the other?

Dr. LYONS. I agree it looks that way. I can comment on that a bit more if you like.

Mr. SMITH. All right.

Dr. LYONS. The budget we propose has $10 million in it for the Advanced Technology Program and $5 million for the manufacturing technology centers. That is, in fact, $2.5 million less than was finally appropriated last fall.

The budget, of course, was formulated before the Conference Committee decided on those numbers. It certainly appears as though we have actually cut the MTC program.

Our intent, based on the Secretary's wishes, was to hold the MTC program level. We thought we were level funding them at the time last summer. The Secretary said in testimony that he wished to evaluate the first three centers at their current level before moving forward with them.

Subsequent events overtook that. It appears to be a cut, but we did not mean to reduce their funding. Neither did we mean to increase it until the Secretary had taken that look and agreed that they were doing well.

Later in my statement, I do discuss the three MTC operations. I offer the opinion that based on the first year's experience, they do seem to be doing well. The Secretary has become very interested in this and proposes to visit one.

Tentatively, we are going to visit one center next week. Then we are going to work out our future plans for implementing the wishes of the Conference Committee.

SUPPLEMENTAL BUDGET REQUEST

Mr. SMITH. Will you be having a revision in your budget request or supplemental request?

Dr. LYONS. I don't think we are talking about a supplemental at this point.

Mr. SMITH. You would be talking about a revision in your request?

Dr. LYONS. We may wish to discuss with you some arrangement within the current ceiling.

Mr. SMITH. When do you expect to have that?

Dr. LYONS. First we need to get this field visit out of the way and get the Secretary to agree that——

Mr. SMITH. What I am getting at is we intend to conclude our hearings by Easter and then we can start working over the Easter period on getting our budget proposal put together. Will we have your information in time?

Dr. LYONS. Yes, sir, I think so. Easter is five more weeks, I guess. We should be able to do that.

Mr. SMITH. Okay.

SEQUESTRATION

Now, how did you handle sequestration?

Ms. **Christensen**. We had a sequestration of a little less than $1.8 million. We handled it by across-the-board belt tightening, lapsing in hiring plans. We did not eliminate any programs.

BUDGET REQUEST TO OMB

Mr. **Smith**. What was your request to OMB? How much did you request that you didn't get?

Dr. **Lyons**. We asked for $210.5 million.

Mr. **Smith**. And you got?

Dr. **Lyons**. We got $198.4.

Mr. **Smith**. What does that $12 million represent? What was cut out?

Dr. **Lyons**. Some work on databases, a reduction in a couple of our laboratory programmatic proposals. Here is one cut in half—the Integrated Systems Digital Network.

Looking down the list, there has been a general slicing of each of the proposals. I do not see a large number that was simply deleted.

Mr. **Smith**. I see. We would like to get the details for the record.

[The information follows:]

OMB Changes to NIST Budget Request

[Dollars in Millions]

Item	*Change ($M)*
Chemical Measurements and Standards	−$.6
Intelligent Processing of Materials	−1.3
Lightwave Measurement Technology	−2.0
Advanced Semiconductors	−1.3
High Temperature Superconductors	−.6
Intelligent Machines	+2.0
ISDN	−1.0
Computer Security	−1.0
U.S. Response to EC 1992	−.5
Advanced Technology Program	+1.6
Scientific Computer Upgrade	−2.5
Facilities Retrofit	−2.0
Adjustments to Base	−1.1
Sequester	−1.8
Total Change	−12.1

STATUS OF AUTHORIZATION

Mr. **Smith**. What is the status of your authorization?

Dr. **Lyons**. We have had our hearings. They were completed last week.

Mr. **Smith**. Any major bones of contention or big controversies?

Dr. **Lyons**. Same subject we will be talking with you about. That is the question of inside-outside balance, where the authority is really going to come from, how we can handle both of these challenges.

Mr. **Smith**. Was there talk about putting the external programs in Technology Policy?

Dr. **Lyons**. No, no, not in the hearings, anyway.

Mr. **Smith**. Mr. Rogers?

NIST LABORATORY RESEARCH

Mr. ROGERS. Dr. Lyons, I am sure you agree with us that the extramural programs are necessary, particularly in the transfer of technology to the real world. But, what you do in-house obviously is terribly important as well.

I wonder if you might be able to give us a couple of minutes worth on how NIST core programs can help us become competitive again.

Dr. LYONS. Yes, sir, I would be glad to.

Perhaps I can also get back to the advanced digital systems business with you, if I may. I think that is a good example.

I think that what we do mostly in our laboratories, is, in fact, to fill this gap between the fundamental academic research on the one hand and technology transfer and the nuts and bolts of business development on the other hand. The space in between is sometimes called applied research or commercial development activities.

Our programs in general have been designed to fill that gap, that is, our assignment as we take it all the way back to the 1901 act, was to help industry. The question is how you do that and how you do it without getting in their way and how you do it without becoming so proprietary that you begin to get the patents rather than your industrial clients, which in my opinion is not desirable.

You are always looking to fill that hole. We were asked by our statutory Visiting Committee to demonstrate the utility of our work in terms of industrial impacts last year. Jointly with the Visiting Committee, we developed a series of case studies. In fact, I brought it with me. I would like to either submit for the record or give it to the staff so you can study this. This is a whole series of mini case histories of how our laboratory work has impacted industry.

Mr. ROGERS. It may be useful to put this review in the record.

Mr. SMITH. Let's have the staff look at it and see how much of it can be used.

Dr. LYONS. This question has come up obviously before as to why we put money into NIST and what real effect does it have. I think we do fulfill a role that is different than the typical national laboratory.

You had a discussion on HDTV with the previous panel. First of all, in the case of HDTV, those technologies that are crucial for its success will cause its failure if we don't do the job. There are about four that I would like to talk about that we do.

First is what we call lightwave technology. Most people call it fiber-optics communications. I am pleased to point out that my very first laboratory priority is our $5.5 million increase for lightwave technology.

The point of that is to make industry able to make and sell the essential components, not just the fibers, but the switches, multiplexers, the modulators. There is a whole set of electronics systems that will become optical systems that have to be characterized. We have to develop ways of specifying them, showing their performance and enabling industry to buy and sell them.

We first got into the fiber business because Bell Laboratories said we can't buy these things; would you please get involved with

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: Manufacturing Technology Centers

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	($112)
11.9	Total personnel compensation	(112)
12.1	Civilian personnel benefits	(30)
21	Travel and transportation of persons	(12)
22	Transportation of things	(3)
23.3	Communications, utilities, and miscellaneous charges	(37)
24	Printing and reproduction	(2)
25	Other services	(27)
26	Supplies and materials	(27)
31	Equipment	(0)
41	Grants	(2,250)
99	Direct obligations	(2,500)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: Manufacturing Technology Centers

Title	Grade	Number	Annual Salary	Total Salaries
Mechanical engineer	14	(1)	($50,341)	($50,341)
Mechanical engineer	13	(1)	(42,601)	(42,601)
Secretary	6	(1)	(18,712)	(18,712)
Total		(3)		(111,654)
Rounding Adj		(0)		(346)
Total full-time permanent		(3)		(112,000)

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	(3)
Authorized Positions:	
Full-time permanent	(3)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial technology services	Pos./BA	97	$26,086	90	$22,136	(7)	($3,950)
	FTE/Obl.	104	26,086	97	22,136	(7)	(3,950)
State technology extension program	Pos./BA	3	1,300	0	0	(3)	(1,300)
	FTE/Obl.	3	1,300	0	0	(3)	(1,300)

State Technology Extension Program - A decrease of $1,300,000 and 3 positions is proposed for this program. The Administration supports the increased utilization of Federal technology by small to medium-sized businesses, and Federal agencies have been charged with facilitating transfer of technology in accordance with Executive Order 12591. Each state has responsibility for its own economic development. This program duplicates functions being carried out by SBA's Small Business Innovative Research Program, the Federal Laboratory Consortium, and many state programs.

In fiscal year 1991 the Administration is proposing funding for the Manufacturing Technology Centers which will transfer technology to small and medium-sized businesses.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: State Technology Extension Program

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	($152)
11.9	Total personnel compensation	(152)
12.1	Civilian personnel benefits	(41)
21	Travel and transportation of persons	(20)
22	Transportation of things	(5)
23.3	Communications, utilities and miscellaneous charges	(48)
24	Printing and reproduction	(3)
25	Other services	(998)
26	Supplies and materials	(32)
31	Equipment	(1)
99	Direct obligations	(1,300)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: State Technology Extension Program

Title	Grade	Number	Annual Salary	Total Salaries
General physical scientist..........................	15	(1)	($59,216)	($59,216)
General physical scientist..........................	14	(1)	(50,341)	(50,341)
General physical scientist..........................	13	(1)	(42,601)	(42,601)
Total..		(3)	—	(152,158)
Rounding adjustment..................................		—		158
Total full-time permanent.......................		(3)		(152,000)

Personnel Data

Full-Time Equivalent Employment:		
Full-time permanent.............................	(3)	
Authorized Positions:		
Full-time permanent.............................	(3)	

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial technology services	Pos./BA	97	$26,086	90	$22,136	(7)	($3,950)
	FTE/Obl.	104	26,086	97	22,136	(7)	(3,950)
Evaluation of non-energy related inventions	Pos./BA	1	150	0	0	(1)	(150)
	FTE/Obl.	1	150	0	0	(1)	(150)

Evaluation of Non-Energy Related Inventions - A decrease of $150,000 and 1 position is proposed for this program. NIST received funding in fiscal year 1989 and 1990 for a non-energy related inventions program. The Administration opposes further funding for this program. Funds were provided to evaluate a non-energy related program modeled after the Energy-Related Inventions Program funded by the Department of Energy (DOE). On a reimbursable basis with DOE, NIST evaluates energy-related inventions and DOE provides grants for new technologies that can improve energy efficiency, reduce energy costs, and provide new sources of power. The Administration opposes development of a similar program for non-energy related inventions. Federal support for U.S. competitiveness should be provided through initiatives in NIST's core programs and through the new Advanced Technology Program and Manufacturing Technology Centers, as requested in this budget. Furthermore, evidence indicates that this program, unlike the DOE Program, would not provide a reasonable return on the Government's investment.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: Evaluation of Non-Energy Related Inventions

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	($50)
11.9	Total personnel compensation	(50)
12.1	Civilian personnel benefits	(14)
21	Travel and transportation of persons	(10)
22	Transportation of things	(0)
23.3	Communications, utilities, and miscellaneous charges	(16)
24	Printing and reproduction	(0)
25	Other services	(55)
26	Supplies and materials	(5)
31	Equipment	(0)
99	Direct obligations	(150)

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Industrial Technology Services
Program Change: Evaluation of Non-Energy Related Inventions

Title	Grade	Number	Annual Salary	Total Salaries
Electrical engineer................................	14	(1)	($50,341)	($50,341)
Total...		(1)		(50,341)
Rounding adj....................................				341
Total full-time permanent.......................		(1)		(50,000)

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent..............................	(1)
Authorized Positions:	
Full-time permanent..............................	(1)

Industrial Technology Services
Reimbursable Program by Source of Support

(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Energy	$2,069	$2,194	$2,326
National Science Foundation	463	491	520
Other	1,300	1,378	1,461
Total, Other Agency	3,832	4,063	4,307
Calibrations and Test	1,297	1,374	1,457
Standards Reference Materials (SRM)	3,592	3,808	4,036
Technical and Advisory Services	4,400	4,664	4,944
Total, Reimbursable Program	13,121	13,909	14,744

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Research Support Activities

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Technical competence program	Pos./BA..	80	$7,151	79	$6,913	77	$7,223	77	$7,223	0	0
	FTE/Obl..	86	6,801	86	6,964	84	7,223	84	7,223	0	0
Research associate program	Pos./BA..	44	2,869	44	2,855	43	3,025	43	3,025	0	0
	FTE/Obl..	47	2,492	47	2,855	46	3,025	46	3,025	0	0
Computing support	Pos./BA..	41	5,845	41	5,855	40	6,421	66	9,543	26	$3,122
	FTE/Obl..	44	5,719	44	6,098	43	6,421	43	9,543	0	3,122
Facilities modifications and improvements	Pos./BA..	6	2,258	6	2,236	6	2,256	6	3,256	0	1,000
	FTE/Obl..	6	2,657	6	2,275	6	2.256	6	3,256	0	1,000
Special facilities	Pos./BA..	21	6,512	21	6,447	21	6,545	21	6,545	0	0
	FTE/Obl..	23	5,982	29	7,684	31	6,545	31	6,545	0	0
Direct obligations	Pos./BA..	192	24,635	191	24,306	187	25,470	213	29,592	26	4,122
	FTE/Obl..	206	23,651	212	25,876	210	25,470	210	29,592	0	4,122

Department of Commerce
National Institute of Standards and Technology
Working Capital Fund
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Research Support Activities

		1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Competence	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	0	0	0	0	0	0	0	0	0	0
	Subtotal.......	0	0	0	0	0	0	0	0	0	0
Research Assoc.	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	0	0	0	0	0	0	0	0	0	0
	Subtotal.......	0	0	0	0	0	0	0	0	0	0
Computing support	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	14	$2,062	14	$2,075	14	$2,088	14	$2,088	0	0
	Subtotal.......	14	2,062	14	2,075	14	2,088	14	2,088	0	0
Facilities	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	0	0	0	0	0	0	0	0	0	0
	Subtotal.......	0	0	0	0	0	0	0	0	0	0
Special Facilities	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	0	0	0	0	0	0	0	0	0	0
	Subtotal.......	0	0	0	0	0	0	0	0	0	0
Non-technical supporting services	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	47	5,818	47	6,070	47	6,345	47	6,345	0	0
	Subtotal.......	47	5,818	47	6,070	47	6,345	47	6,345	0	0

		1989 Estimate		1990 Currently Available		1991 Base		1991 Estimate		Increase (Decrease) Over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
WCF investments & operating services	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	0	793	0	0	0	0	0	0	0	0
	Subtotal.......	0	793	0	0	0	0	0	0	0	0
Total requirements											
	WCF transfers.......	0	0	0	0	0	0	0	0	0	0
	Reimbursable FTE/Obl.......	61	8,673	61	8,145	61	8,433	61	8,433	0	0
	Total.......	61	8,673	61	8,145	61	8,433	61	8,433	0	0

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
JUSTIFICATION OF PROGRAM AND PERFORMANCE
RESEARCH SUPPORT ACTIVITIES

Goals and Objectives

Goals:

This NIST subactivity supports the Department of Commerce goal of promoting the development and application of science and technology in U.S. industries. Research Support Activities are the centrally managed programs with the following individual goals: (1) Technical Competence Program - to develop competence in NIST mission-oriented areas of research and services upon which NIST and its clientele can rely for expertise now and in the future; (2) Research Associate Program - to provide outstanding scientists and engineers from industry, academia, and other Federal agencies an opportunity to participate in research programs in the various branches of physical, chemical, engineering, and mathematical sciences; (3) Computing Support - to provide computer support to scientific and engineering research programs with continually increasing computational needs; (4) Facilities Modifications and Improvements - to maintain a satisfactory environment for conducting the NIST technical programs; and (5) Special Facilities (Cold Neutron Research Facility) - to provide U.S. scientific and industrial communities with critical measurement capabilities on the properties, performance, and processing of materials and chemicals.

Objectives:

- Ensure that NIST has the knowledge and skills necessary to meet the responsibilities included in its enabling legislation and additional legislative mandates and administrative directives.
- Select postdoctoral scientists and engineers of unusual promise and ability to augment NIST's technical competence.
- Augment existing computing capability to provide scientists and engineers with state-of-the-art computing resources.
- Provide improvements, replacements, and modifications to the NIST facilities that ensure the continued usefulness and safety of existing laboratories and buildings and compliance with polychlorinated biphenyls (PCB) and asbestos regulations.
- Provide a national center for development and application of neutron measurement methods for U.S. materials science and technology and stimulate industry, university, and government cooperation through shared use of major facilities.

Base Program

The activities in this subactivity include the centrally managed programs that provide support to all other NIST programs.

Technical Competence Program - enables NIST scientists to develop the knowledge and skills needed to address technical opportunities and needs as they occur. NIST has developed staff expertise in areas as diverse as automated manufacturing, robotics, biotechnology, bioprocess engineering and advanced ceramics. A large number of these fundamental efforts have already had tangible effects on NIST programs and its capacity to contribute to future national needs and goals.

Research Associate Program - provides high caliber scientists and engineers for ongoing research programs and a mechanism for the transfer of the results of NIST research to the scientific and engineering communities. The Research Associate Program serves as an excellent information exchange system and recruitment vehicle.

Computing Support - provides for the staffing and operation of the supercomputer systems and associated equipment which comprise the central component of the Consolidated Scientific Computer System.

Facilities Modifications and Improvements - improves operational capabilities of NIST facilities, undertakes modifications to improve access for the handicapped, keeps existing buildings and facilities up-to-date and responsive to NIST programs, safety requirements, and compliance with Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) regulations affecting exposure to PCB's and asbestos.

Special Facilities: Cold Neutron Research Facility - construction provides U.S. scientific and industrial communities with urgently needed, internationally competitive research capabilities on the properties, performance, and processing of materials and chemicals. Researchers at this facility will include NIST scientists and engineers as well as industrial teams and personnel from academic institutions all over the nation. This unique research tool allows non-destructive studies of the structure, dynamics and microstructure of all classes of materials. The resolution of detail will far exceed that of other known techniques. The results will help our research establishments and U.S. industry to effectively develop and introduce new and improved materials into the development of advanced products. Significant financial leverage is being achieved by augmenting the existing NIST reactor with the cold neutron capability rather than constructing a new facility which would cost about $200 million and take approximately ten years to complete.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Direct Obligations in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Computing support	Pos./BA	40	$6,421	66	$9,543	26	$3,122
	FTE/Obl.	43	6,421	43	9,543	0	3,122
Scientific computing upgrade	Pos./BA			26	3,122	26	3,122
	FTE/Obl.			0	3,122	0	3,122

Scientific Computing Upgrade - Funding this increase in fiscal year 1991 will enable NIST to respond to the needs of its scientific and engineering staffs by providing more computing power, expanded capacity, greater flexibility, and enhanced software support to meet rapidly growing computational requirements, which are of critical importance to NIST's mission. Scientific computing is used by NIST scientists and engineers to enhance insight and improve understanding of physical phenomena, to test theories against experiments, to predict behavior, and to provide a substitute for more expensive laboratory experiments and field observations. Additionally, NIST shares the scientific computing facility with National Oceanic and Atmospheric Administration/Environmental Research Laboratories and National Telecommunications and Information Administration.

The supercomputer and front-end facilities installed in 1985 have been a great success in meeting the original goals. This very success, however, has resulted in system saturation to the point where critical mission needs will not be met if action is not taken to upgrade significantly our scientific computing capabilities. This upgrade was presented to Congress in the fiscal year 1990 budget and while accepted conceptually, was delayed until this year because of higher priorities.

The present system, centered on the Cyber 205, suffers from a number of problems which have become especially apparent as the system has become overloaded. The memory is too small to handle more complex problems. The existing system is incompatible with the many other computing tools now in use, such as workstations, local area networks and associated minicomputers and graphics devices. It cannot be used interactively and therefore is an inefficient tool for the scientist. The manufacturer, Control Data Corporation, has gone out of the supercomputer business, and there are concerns about continued maintainability of the Cyber 205. If we are unable to proceed this year, all NIST base programs will suffer from inadequate computer support.

The major thrust of this initiative is improved scientific productivity. The introduction of more powerful, flexible and useful computational tools will provide NIST scientists and engineers with analytical and design tools of critical value to the industries with which they collaborate. As a side benefit, NIST, being an open facility with a broad mission, can provide advice and leadership to industrial and academic computing facilities in demonstrating how a highly flexible center can carry out its mission.

NIST proposes to enhance its computational capabilities through modernization of resources to take advantage of the remarkable technological advances and cost/performance improvements that have occurred since the installation of the supercomputer facility. Functional requirements include:

- o More (and/or faster) processing cycles to handle the most complex models;
- o More memory to meet needs for greater precision and more detail in representation;
- o Enhanced connectivity to integrate the central facility fully into the NIST networked environment;
- o Interactive supercomputing to facilitate the direct connection of workstations with the most powerful systems on the network;
- o Compatibility with the many UNIX-based workstations and other systems at NIST to reduce the burden on users to adjust to the different systems;
- o Enhanced mass storage to reduce greatly the level of duplication of large masses of data that now exists because of the need for such data among users of several computing devices, or among various users who need common data on different local devices.

Current technology is capable of implementing these functional requirements in a myriad of ways. The NIST plan will provide for meeting needs in a manner that provides flexibility for growth and change in requirements and technology. Modularity is a key element in achieving this goal. The plan will also provide for an orderly transition so as not to disrupt the user community unduly.

Planned accomplishments in fiscal year 1991 include the following:

- o Replace the existing Cyber 205 supercomputer with a modern midi-supercomputer to provide greater processing power, enhanced operating system compatibility, and larger memory.
- o Acquire interactive systems to replace the existing Cyber 855 in Gaithersburg and Cyber 840 in Boulder to provide operating system compatibility with the supercomputer and local workstations.

The acquisition of several components of the scientific computing system will be phased in during fiscal years 1992 and 1993. Increased support staff will be hired, beginning in fiscal year 1992, to facilitate the work of scientists and engineers by smoothing the interfaces among computers and systems of different manufacturers, to optimize the use of computing resources, to train and consult with them on specific applications, and to adapt software to meet their unique needs. Other outyear adjustments include funds for maintenance of equipment which is owned at the conclusion of the lease period.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Measurement and Engineering Research and Standards
Subactivity: Research Support Activities
Program Change: Scientific Computing Upgrade

Object Class		1991 Increase/ (Decrease) Oblig.
11.1	Full-time permanent	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	0
21	Travel and transportation of persons	$35
22	Transportation of things	0
23.3	Communications, utilities and miscellaneous charges (computer equipment leases)	1,200
24	Printing and reproduction	0
25	Other services	836
26	Supplies and materials	60
31	Equipment	991
99	Direct obligations	3,122

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Measurement and Engineering Research and Standards
Subactivity: Research Support Activities
Program Change: Scientific Computing Upgrade

Title	Grade	Number	Annual Salary	Total Salaries
Computer scientist	14	3	$50,341	$151,023
Computer scientist	13	3	42,601	127,803
Computer specialist	13	1	42,601	42,601
Computer scientist	12	3	35,825	107,475
Computer specialist	12	2	35,825	71,650
Computer scientist	11	2	29,891	59,782
Computer specialist	9	2	24,704	49,408
Computer scientist	9	2	28,272	56,544
Administrative/technical support	9	3	24,704	74,112
Computer specialist	7	4	20,195	80,780
Secretary	5	1	17,936	17,936
Total		26		839,114
Less lapse 100%		(26)		(839,114)
Total full-time permanent		0		0

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	0
Authorized Positions:	
Full-time permanent	26

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
CHANGES FOR FY 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Facilities modifications and improvements	Pos./BA	6	$2,256	6	$3,256	0	$1,000
	FTE/Obl.	6	2,256	6	3,256	0	1,000
Facilities retrofit	Pos./BA			0	1,000	0	1,000
	FTE/Obl.			0	1,000	0	1,000

Facilities Retrofit - This request will begin a program to support the safety, system capacity and obsolescence requirements of the NIST facilities at Gaithersburg, Maryland and Boulder, Colorado, which are 25 and 35 years old, respectively. One of the critical variables of an organization's institutional health is its building environment. The unique problems associated with housing and maintaining a research facility create unusual and changing demands on the physical plant. Building codes, technology and safety standards (many of them researched and verified by NIST) have changed dramatically in the years since our facilities were constructed and, therefore, improvements are necessary to bring the facility up to current standards. NIST has identified $40 million in acute problem areas that must be addressed over the next few years. The requested $1 million plus an additional $.7 million to be collected from reimbursable customers would allow NIST to begin to address the most critical priorities identified in FY 1991 and future years.

Safety

In fiscal year 1989, an electrical fire in a clean room and a chemical explosion in a laboratory hood prompted NIST to conduct a risk assessment. Local officials and staff from our own Centers for Fire Research and Building Technology participated. There was agreement that damage from the fire and explosion would have been less extensive and would have reduced interruption of program operation had current technology fire suppression and sensor alarm systems been in place. Some major observations of the risk assessment were: NIST is not in compliance with building code requirements for installation of fire sprinklers in structures; there is no fire suppression system in the main chemistry storeroom; fire walls are missing or damaged creating open cavities in some laboratory corridors; and water supply and pressure problems exist at higher elevations at the Boulder site.

System Capacity

Advanced technology has replaced many traditional laboratory procedures with a generation of electronics with a high sensitivity to temperature and relative humidity and a demand for "quality" power. At NIST Gaithersburg, the demand for increased cooling capacity requires the modification of the main plant building to accommodate an additional chiller. The need for "quality" power has become a major requirement as the use of computers for experiment control, data and word processing, electronically sensitive high tech instrumentation and switched-mode power supplies have proliferated in the laboratory environment. A variety of protective devices are needed to provide power redundancy to our most critical research facilities and minimize the risk of lost or scrambled data, damaged equipment, and interruption of service to our constituency.

Obsolescence

When the NIST sites were constructed at Gaithersburg and Boulder many research facilities were designed, built and paid for as integral parts of the original construction. Some are at the point of technological obsolescence. For example, we will find ourselves in the position of opening a world-class Cold Neutron Research Facility, made possible by the unique design of our nuclear reactor whose control panel is still being operated by twenty-five year old technology. The replacement of the reactor's control panel along with projects to update and retrofit wet chemistry laboratories, the applied nuclear measurement facility and dimensional metrology laboratories are high on the priority list for this initiative.

NIST's broadened technology support role, the use of its facilities by industry for proprietary research, and cooperative research conducted on site by leading industrial and university scientists and engineers make a shut down due to building system failure intolerable. Planned replacement and upgrade for safety, system capacity, and obsolescence are critical to the institutional health of this organization if NIST is to fulfill its mission in support of industrial competitiveness.

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: **Measurement and Engineering Research and Standards**
Subactivity: **Research Support Activities**
Program Change: **Facilities Retrofit**

Object Class	1991 Increase/ (Decrease) Oblig.
25 Other services..	$1,000
99 Direct obligations......................................	1,000

Research Support Activities
Reimbursable Program by Source of Support

(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Other Agency Funding:			
Department of Commerce	$5,125	$5,287	$5,458
Department of Treasury	57	60	64
Other	44	46	50
Total, Other Agency	5,226	5,393	5,572
Technical and Advisory Services	2,654	2,752	2,861
WCF Investment	793	0	0
Total, Reimbursable Program	8,673	8,145	8,433

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Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	$70,535	$76,225	5,690
11.3	Other than full-time permanent	5,392	5,392	0
11.5	Other personnel compensation	1,363	1,363	0
11.9	Total personnel compensation	77,290	82,980	5,690
12.1	Civilian personnel benefits	15,020	16,556	1,536
13	Benefits for former personnel	44	44	0
21	Travel and transportation of persons	2,786	3,689	903
22	Transportation of things	340	850	510
23.2	Rental payments to others	263	263	0
23.3	Communications, utilities, and miscellaneous charges	7,347	10,061	2,714
24	Printing and reproduction	503	633	130
25	Other services	20,390	26,147	5,757
26	Supplies and materials	8,769	10,603	1,834
31	Equipment	15,597	18,714	3,117
32	Lands and structures	667	667	0
41	Grants, subsidies and contributions	19,679	17,429	(2,250)
99	Total, direct obligations	168,695	188,636	19,941
	Transfer to National Institute of Standards and Technology Working Capital Fund	361	9,772	9,411
	Total budget authority	169,056	198,408	29,352

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-time Equivalent Employment			
Full-time permanent	1,479	1,635	156
Other than full-time permanent	177	177	0
Total	1,656	1,812	156
Authorized Positions			
Full-time permanent	1,531	1,835	304
Other than full-time permanent	265	265	0
Total	1,796	2,100	304

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11.1 Full-t [illegible] anent			
Execut [illegible] el	49	49	0
Senior executive service	4,667	4,667	0
General schedule	60,352	66,042	5,690
Wage board	4,415	4,415	0
P.L. 80-313	1,052	1,052	0
Subtotal, permanent positions	70,535	76,225	5,690
11.3 Other than full-time permanent			
General schedule	4,989	4,989	0
Wage board	398	398	0
Expert and consultant	4	4	0
Student	1	1	0
Subtotal, other than full-time permanent	5,392	5,392	0
11.5 Other personnel compensation			
Overtime	439	439	0
SES performance awards	0	0	0
Cash awards	856	856	0
Merit pay awards	0	0	0
Other	68	68	0
Subtotal, other personnel compensation	1,363	1,363	0
11.9 Total personnel compensation	77,290	82,980	5,690
12.1 Personnel benefits			
Civil service retirement	3,464	3,464	0
Federal Employees' Retirement System (FERS)	3,499	4,238	739
Thrift savings plan	877	989	112
Federal Insurance Contribution Act (FICA)	2,642	3,075	433
Health insurance	3,673	3,906	233
Life insurance	148	167	19
Employees' Compensation Fund	489	489	0
Other	228	228	0
Subtotal, personnel benefits	15,020	16,556	1,536

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
13	Benefits for former personnel			
	Severance pay	44	44	0
	Unemployment compensation	0	0	0
	Subtotal, benefits for former personnel	44	44	0
21	Travel and transportation of persons			
	Common carrier	1,141	1,511	370
	Mileage	58	84	26
	Per diem	1,197	1,568	371
	Other	390	526	136
	Subtotal, travel and transportation of persons	2,786	3,689	903
22	Transportation of things			
	Subtotal, transportation of things	340	850	510
23.2	Rental payments to others			
	Total, Rental payments to others	263	263	0
23.3	Communications, utilities, and miscellaneous charges			
	Rental of automatic data processing equipment	193	1,432	1,239
	Rental of office copying machines	192	262	70
	Other equipment rentals	206	251	45
	Federal Telecommunications System (FTS)	126	175	49
	Other telephone, telegraph and teletype services	1,082	1,400	318
	Postal services by USPS	535	617	82
	Utilities:			
	Electricity	3,262	3,875	613
	Gas	1,116	1,305	189
	Water/Sewer	635	744	109
	Subtotal, communications, utilities and miscellaneous charges	7,347	10,061	2,714

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
24 Printing and reproduction			
Publications	254	324	70
Other printing and reproduction	249	309	60
Subtotal, printing and reproduction	503	633	130
25 Other services			
Training:			
Office of personnel management	15	15	0
Other	423	482	59
Maintenance of equipment	2,806	2,956	150
ADP Services	1,037	1,037	0
Payments to GA, WCF	1,303	1,303	0
Other Federal agencies:			
Department of Commerce	2,353	5,087	2,734
Other	489	672	183
Public sector	11,964	14,595	2,631
Subtotal, other services	20,390	26,147	5,757
26 Supplies and materials			
Laboratory and general supplies	5,842	7,676	1,834
Scientific publications and journals	548	548	0
Fuel oil	90	90	0
Reactor fuel and supplies	2,289	2,289	0
Subtotal, supplies and materials	8,769	10,603	1,834
31 Equipment			
Office machines and other equipment	5,175	6,936	1,761
ADP equipment	1,043	2,399	1,356
Equipment depreciation	9,379	9,379	0
Subtotal, equipment	15,597	18,714	3,117

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
32 Lands and Structures	667	667	0
41 Grants, subsidies and contributions			
Subtotal grants, subsidies and contributions	19,679	17,429	(2,250)
Total direct obligations	168,695	188,636	19,941
Transfer to National Institute of Standards and Technology Working Capital Fund	361	9,772	9,411
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Other than full-time permanent	265	265	0
Total	1,796	2,100	304

Department of Commerce
National Institute of Standards and Technology
Scientific and Technical Research and Services

BUDGET APPENDIX ADJUSTMENTS

The following object class adjustments to the Budget Appendix are necessary as a result of additional FTE's provided to meet first year employment needs of requested program changes.

Object Class	Displayed in Appendix	Revised	Change
11.1	75,742	76,225	+483
11.9	82,497	82,980	+483
12.1	16,427	16,556	+129
25.0	26,759	26,147	-612
FTE	1,797	1,812	+15

National Bureau of Standards

CONSOLIDATED SCHEDULE OF AVERAGE GRADE AND SALARY

	1989 Actual	1990 Estimate	1991 Estimate
Average ES salary	$75,985	$78,720	$81,869
Average GS grade	10.87	10.87	10.91
Average GS salary	41,797	41,749	41,136
Average salary of ungraded positions	25,976	25,976	26,517

this and sort it out. We have now produced 25 or 30 standards. We don't make the standards. We make the recommendations. There have now been issued 30 standards that enable people to buy and sell fibers. That is an enabling role. I think enabling is a pretty good term. It doesn't put us in the business of knowing how to make a better fiber, but it sure helps the industry to understand what they are doing in order to develop trade.

At any rate, lightwave fiber optics systems are the first one. We have an initiative for advanced semiconductor technology, which is the same sort of thing. As the industry goes down smaller and smaller, the current ways of characterizing and specifying semiconductors are not going to work anymore. They have gone beyond the current technology.

We have to help industry develop new techniques for quality assurance and for specifying semiconductors.

In the HDTV area, as you know, one of the two areas DARPA is working on are the advanced processors for handling the digital signals. We have asked for an increase of $3.9 million for advanced semiconductor technology.

The third area is ISDN. That is an acronym for Integrated Systems Digital Network. The issue here is if you are going to install fibers to the home and you want to put on not only voice but also data, commercial information, stock market information, and video all on the same fiber and you want to move those signals around the world by way of the long distance lines and the satellites and all of that, there have to be agreements, not at the electronic level, but at the software level as to how we are going to put these signals together and take them apart at the other end and use them for whatever purpose we want to use them. The consensus agreements that are required are all bunched together and called ISDN.

Our laboratory plays a key role, as it always has, in that kind of computer standardization. We have asked for a small increase there, $1 million. That is one of the ones I said was affected by the cutback.

Microwave technology is another area where the signals—the satellite transmissions are all done at microwave levels. We have provided measurement assurance services to the microwave industry for a long time.

Finally, in the image analysis, how do you know when you multiplex a lot of signals together, what are the acceptable levels of interference, how much snow do you want to accept on your screen? We have been offered by DARPA something called the Princeton Engine, which is a special computer being built at Princeton. It is designed specifically just to handle the image analysis question that relates to video multiplexing and transmission and data compression.

They asked us, "Would you be willing to accept this $2 million computer if we had one available for you?" The price they wanted to extract from us was to allow their contractors to use it. Otherwise, we are free to use it in our own work.

They are now building such a processer. This DARPA machine will be in our laboratories to help their contractors. These are technologies that relate to moving into advanced image processing.

I hope I gave you some idea of the enabling aspects of that.

Mr. **Rogers**. You certainly did, and I appreciate it.

I have looked to some extent at the pamphlet which you tendered in your testimony. I think it probably would be useful to have us include that in the record.

Mr. **Smith**. I studied it last night. I am not quite sure. It may need some more explanations some places as to what it means. Is that possible?

Dr. **Lyons**. I think you may have two blue covered reports in your possession. That is a new one, newer one even from yesterday.

Mr. **Smith**. You are right.

Mr. **Rogers**. I think it is a fairly good explanation.

Mr. **Smith**. Let's look at the other one, too.

Dr. **Lyons**. The other one is too thick for the record.

Mr. **Rogers**. The one you are tendering is Technology for U.S. Industry.

Mr. **Smith**. Who is this distributed to?

Dr. **Lyons**. This was done for the NIST Visiting Committee. It was a request by the Deputy Secretary of Commerce.

Mr. **Smith**. It is not widely distributed?

Dr. **Lyons**. No.

Mr. **Smith**. We will put it in the record. Then it will be available.

[The information follows:]

TECHNOLOGY FOR U.S. INDUSTRY

A Review of
National Institute of Standards and Technology
Support of Industry
in Science, Engineering, and Technology Transfer

The Visiting Committee on Advanced Technology
of the
National Institute of Standards and Technology

January 1990

Preface

This report summarizes the results of a study by the Visiting Committee on Advanced Technology of the National Institute of Standards and Technology on the impact of the Institute on U.S. industry. The report reviews the many mechanisms NIST has developed to support and work with industry, and describes selected examples of NIST programs that have provided substantial benefits to U.S. commerce and competitiveness.

The report was compiled and edited by the Executive Director of the Visiting Committee. The Committee acknowledges the cooperation of the Institute in providing technical and other data at the Committee's request. The technical organizations within NIST supplied factual and background information for Parts II and III of the report, and worked closely with the Executive Director to ensure that the impact statements in Part II were accurate. The NIST Program Office supplied statistics in Part I, and assisted in compiling and verifying information in other parts of the report. The Public Information Division at NIST assisted in compiling the list of R&D 100 Award winners in Part V.

The Visiting Committee on Advanced Technology
January 1990

William D. Manly, Chairman
Arden L. Bement, Vice Chairman
John G. Bollinger
Nolen M. Ellison
Jeanette G. Grasselli
William G. Howard
John P. McTague
William P. Slichter
William J. Spencer

Dale E. Hall, Executive Director

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Part II. Selected Program Impact Statements 15

Part III. Industrial Interactions of NIST Centers 49

Part IV. Industrial Representation on NIST Evaluation Panels 77

Part V. NIST R&D 100 Awards 87

SUMMARY

The National Institute of Standards and Technology supports U.S. industry with measurements, standards, data, and test methods; generic technology development; and technology transfer assistance. This support helps industry to improve process control and product quality, raise productivity, and commercialize new technologies.

This Summary describes briefly some of the many mechanisms NIST uses to work with industry, and several highlights that demonstrate the benefits of NIST programs to a wide range of industries. Considerably more detail on both of these subjects is found in the full report.

Mechanisms of Support to Industry

NIST programs and services reach most leading U.S. firms. The most recent data (page 6) show that, among industry leaders in total research and development spending, all of the top 10 and more than half of the top 100 companies use NIST calibration services. NIST standard reference materials are used by all of the top 10, and 90 of the top 100. Twenty-seven of the top 50 companies have placed research associates at the Institute in the last 10 years. NIST programs and services are also especially important to smaller high-tech firms with limited R&D resources. NIST is involved in many programs with such companies, and is increasing outreach efforts to them through its traditional programs and new technology extension activities.

A constant exchange of information takes place between NIST researchers and their colleagues in industry and elsewhere (page 7). The Institute is a major host of technical conferences, including 93 in 1988 that drew a total of nearly 12,000 attendees. In addition, NIST sponsored 440 workshops and seminars. These conferences, workshops, and seminars are well-attended by industrial scientists and engineers. Numerous one-on-one technical consultations and collaborations also take place regularly between NIST scientists and their counterparts in other organizations, with little or no formal arrangement.

NIST maintains a strong presence in the standards community (page 8). Institute personnel belong to over 400 standards organizations and sit on more than 1300 standards committees, chairing nearly 130 of them. A national center for standards and certification information at NIST maintains information on more than 240,000 documentary standards, specifications, test methods, codes and recommended practices.

Measurement and data services provide another key linkage with the private sector (page 9). In 1988, NIST carried out over 13,000 calibration tests, many of which formed the basis for internal company reference standards. More than 44,000 Standard Reference Materials covering a wide range of physical and chemical properties were sold. Twenty-four Standard Reference Data Centers at NIST turned out over 5000 pages of scientific and engineering data.

During 1988, U.S. industry sent 205 Research Associates to NIST, to work with their NIST colleagues to acquire and develop technology that could then be used by their industrial sponsors (pages 10-11). Sixty-five of the Industrial Research Associates were from small businesses. The number of collaborative interactions has increased dramatically in recent years: the Research Associate program has doubled since 1980, and total cost sharing with industry and other non-federal government groups has more than tripled.

The Industrial Impact of NIST Programs

The technology support provided by NIST benefits U.S. industries as diverse as power generation and transmission, electronics and semiconductors, communications and computers, advanced manufacturing, materials, chemicals, construction, and health care. The following examples, selected from the full report and presented here as brief abstracts, indicate the range and significance of NIST's support to industry.

Power Generation and Transmission (Pages 19-21)

NIST researchers have developed methods that significantly improve the accuracy of natural gas metering, producing an estimated annual savings of $150M in the natural gas industry. This achievement directly impacts the metering of all natural gas pipeline operations in the United States, involving about $60B worth of product per year, benefiting gas producers as well as national and local distributors, processors, and the millions of consumers of natural gas in the nation.

Techniques to measure electric power accurately in high voltage, high current environments were developed at NIST to support the electric power industry, including over 3200 utility companies and their suppliers, who sell about $165 billion worth of electricity and more than $9 billion worth of transformers and switchgear annually. The industry estimates that it performs more than 8 million calibrations per year, all of which are supported by 130 calibrations performed annually by NIST.

NIST supports the export of U.S. watthour meters by providing U.S. manufacturers with calibration support at 50 Hz, the power frequency used in Europe and much of the rest of the world. Industry representatives report that about 20% of the more than $350 million annual domestic watthour meter production is exported.

Electronics and Semiconductors (Pages 22-25)

Measurement facilities and procedures developed by NIST permit engineers to determine if electronic systems will operate without interfering with each other, i.e., have electromagnetic compatibility. Industry exerts a major effort to test and reduce electromagnetic interference, using measurement methods and systems developed by NIST to test devices such as video cassette recorders, electronic devices and systems in automobiles, television receivers, and other electronic products. At least eight U.S. companies sell test systems for electromagnetic compatibility measurements that are based on NIST work.

Optical fiber and components currently represent a $ 3.2 billion per year domestic industry with a growth rate of about 25% per year. As optical fiber technology moved from the laboratory to commercial application, NIST developed the measurement techniques and provided the technical basis for standards needed for commerce. Twenty-eight voluntary standards in the industry are based on NIST work. An official of the Electronic Industries

Association has said that NIST's assistance and leadership has been vital to the competitive position of the U.S. fiber optics industry.

NIST has developed measurement techniques needed by the $20 billion domestic semiconductor industry for process control and evaluation of finished products. A NIST method and Standard Reference Material (SRM) for determining the resistivity of silicon provided industry with savings more than 100 times greater than the cost of NIST research. During the past five years, more than 180 companies have purchased the NIST SRMs. Private-sector estimates of the value of NIST work to the semiconductor industry include five percent of the industry's productivity increase over a five-year period, and annual savings of up to $500 million.

Communications and Computers (Pages 26-29)

A NIST technique has revolutionized performance measurements of microwave antennas, directly impacting a U.S. radio communications and detection industry that shipped $52 billion worth of products in 1988, dominated by radar, communications, and navigation equipment. The NIST-developed "near-field" method provides domestic manufacturers with the most accurate antenna calibrations in the world. Eleven U.S. companies have installed 29 near-field calibration facilities with assistance from NIST. One company estimates that they saved $35 million in testing costs by establishing their own near-field calibration facilities.

NIST leads public and private sector organizations in the development of international standards for Open Systems Interconnection (OSI), which enables users of computer systems to integrate computers, networks, workstations, and communications services, and thus, to exchange electronic information. OSINET, a cooperative government/industry research network organized by NIST, is expediting the commercial development of OSI products. NIST collaborations with industry users, such as General Motors, Eastman Kodak, and Boeing Computer Services, in developing industry OSI specifications, have helped to promote an industry market for interoperable OSI products.

High-accuracy time and frequency standards developed by NIST enable the communications industry to maintain their allocated frequencies and time their broadcasts, allow telephone companies to provide time services and synchronize data transmissions, and are used by the transportation industry to synchronize railroad and air traffic operations. Recently, the city of Los Angeles synchronized part of their traffic light system, using receivers developed by industry through interactions with NIST. Estimates are that the project will save 22 million gallons of fuel per year and 55 thousand hours of driving time per day.

Advanced Manufacturing (Pages 30-32)

A number of companies, including Boeing, Honeywell, AAI, Martin Marietta, Hughes, GM, and AT&T, have collaborated with NIST on proposed applications of a generic Real-time Control System (RCS) architecture to the next generation of controllers for machine tools, measuring machines, robots, workstations, and manufacturing cells. The RCS architecture, based on work carried out in the Automated Manufacturing Research Facility (AMRF) at NIST, is in the process of being adopted by the International Standards Organization as an International Standard Reference Model for Shop Floor Control.

A NIST technique for improving the accuracy of machine tools has enabled U.S. manufacturers to penetrate the highly competitive markets for specialized measuring machine tools in both Europe and Japan. U.S. producers are adopting the NIST-originated technique, which uses computer software to correct for any measured imperfections in the geometry of the machines. Domestic manufacturers who have adapted the technique in their new-generation machines include the Sheffield Measurement Division of Warner and Swasey, and Gliddings and Lewis.

Materials (Pages 33-36)

The NIST Standard Reference Data Program works with the $145 billion U.S. materials industry to provide computerized property data for engineering materials. Working with the National Materials Property Data (MPD) Network, NIST helped establish an ASTM Committee on materials databases, and has led the development of standards in this area. The Ceramic Phase Equilibria Program, for example, provides evaluated data that are needed to develop most advanced ceramics. The American Ceramics Society has raised about $2.5 million from industrial and private sponsors to support the program, and supports industrial research associates at NIST.

A NIST/industry consortium is developing automated processing technology for rapidly solidified metal (RSM) powders. These powders are intended to be consolidated into products, such as jet engine parts and advanced magnets, with exceptional properties. The new technology is expected to lead to major quality and productivity improvements. The project is progressing toward a more sophisticated form of automatic control called "intelligent processing," which will permit production of high-quality RSM powders with a virtually zero reject rate. The project serves as a demonstration of the technological and economic potential of intelligent processing for other materials processes.

A new instrument developed by NIST provides images of the magnetic microstructure of materials, with a resolution about 100 times better than conventional imaging techniques. In cooperation with industry, this "magnetic microscope" is being used to investigate factors affecting the performance of high technology materials for the $30B magnetics industry, which includes computer information storage products and magnetic storage devices. NIST is working with an industrial consortium to develop a second generation, commercial magnetic microscope. NIST has established collaborations with IBM, Kodak, Westinghouse, General Motors, Honeywell, Control Data Corporation, Digital Electronics Corporation, and Perkin-Elmer. Over 100 U.S. companies have inquired about the magnetic imaging technique.

Chemicals (Pages 37-38)

The NIST Standard Reference Data Program provides highly evaluated databases to be used in the computerization of the chemical industries, which produces chemicals and material worth $200B, employs more than 800,000 people and has annual net exports worth over $9B. Working with several industry consortia, NIST has begun releasing evaluated data in computer software that can easily be integrated with other computerized technology. Databases for industrial fluids, including steam, natural gas, refrigerants, and inert gas atmospheres, have been supported by groups such as the Gas Research Institute, the American Petroleum Institute, and the American Society for Mechanical Engineers.

National Institute of Standards and Technology
Scientific and Technical Research and Services
CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Consulting Services	17	18	19
Special studies and analyses	45	36	0
Management & Professional Services	551	665	685
TOTAL	613	719	704

Significant Activities:

Consulting and related services used at the National Institute of Standards and Technology are concerned with:

(1) review and evaluation of the technical functions and operations of NIST by Boards of Assessment of the National Academy of Sciences. These evaluation panels consider the importance and relative priority of projects, quality of staff, equipment needs, finances, and the relation of the program to the mission of NIST;

(2) review and evaluation of candidates for Malcolm Baldrige National Quality Awards; and

(3) various services and studies related to the NIST research programs.

Explanation of Funding Level Changes:

The FY 1990 increase in obligations for management and professional services is due to review and evaluation of applicants for grants associated with the Manufacturing Technology Regional Centers program.

Need for Consulting Services:

The need for consulting and related services stems from the NIST role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertise to bear and help NIST in assessing its programs plans to meet the needs of its customers. The alternative to utilizing these services is to make no attempt to have expertise from sources outside NIST and risk having a poorer working and professional relationship with those in the business of using the products and services offered by NIST.

Research at NIST has contributed to higher accuracy and reduced cost in chemical analyses. Among many specific examples of NIST's contributions is the development of techniques for producing high-purity acids, coupled with the improved capability to measure impurities at extremely low concentrations, leading to a revived interest by the U.S. chemical industry in providing ultra-pure chemicals for the semi-conductor industry. The availability of high-purity reagents in the U.S. is helping U.S. manufacturers to compete with Japan by significantly improving the quality, and consequently reducing the cost of production, of electronic devices.

Construction (Pages 39-41)

Construction is a more than $400 U.S. industry, accounting for 8.4% of GNP. NIST's contributions to the industry include studies of demands for plumbing services and the hydraulic performance of plumbing fixtures, drains and vents. The results of these studies have been incorporated into national standards and referenced in building codes, to save potable water, reduce demands for waste water treatment, and reduce costs of plumbing systems. The National Association of Home Builders estimates that code provisions based on NIST recommendations provide a total savings of about $500 million annually for normal production of homes to which the Dwelling Code is applicable.

In response to industry need, NIST developed the world's first device capable of directly measuring the thermal resistance of insulation at practical thicknesses. The U.S. Chamber of Commerce has testified that availability of reference samples from the device saves $90 million per year in manufacturing costs by providing better quality control of insulation properties during production, thus allowing manufacturers to meet Federal guidelines at minimum cost.

Safety/Environment (Pages 42-45)

NIST has developed technology to identify new, environmentally benign or more efficient refrigerants and refrigerant mixtures to replace Chloro-Fluoro-Carbons and CFC related products. U.S. leadership in alternative refrigerants and products using them will preserve this market for U.S. industry, as well as open larger international markets. NIST is working with the Air Conditioning and Refrigeration Institute to develop property and performance data for alternative refrigerants, and with the Electric Power Research Institute and industrial partners to study alternative refrigeration cycles. Efficiency improvements of over 30% have been shown at NIST, using new refrigerant mixtures compared to conventional single component refrigerants.

The NIST-developed smoke detector performance requirements, installation guidelines, and subsequent studies have played an essential role in establishing a $100 million U.S. residential smoke detector market, and enabled U.S. manufacturers to acquire a 50% share of the world market. NIST's work formed the basis for the UL standards for residential and commercial detectors. In the past 15 years, the fraction of U.S. housing protected by at least one smoke detector has reached an estimated 80%, which has been the major factor in the 30% reduction in residential fire deaths during that period.

Health Care (Pages 46-47)

A NIST national measurement assurance program underpins the $300 million U.S. radiopharmaceutical industry. The program is nearly self-supporting, with the industry sponsoring Research Associates at NIST through the U.S. Council for Energy Awareness. The industry relies on NIST Standard Reference Materials of the short-lived radionuclides as a central element of quality control. Radiopharmaceuticals are used to treat one patient in four admitted to a U.S. hospital, primarily for nuclear-medicine diagnostics such as heart and tumor imaging. Measurement discrepancies have been substantially reduced through programs supported by NIST reference materials and measurements. Because many of the useful radionuclides have short lives, NIST maintains an ongoing program allowing commercial measurements to be traced back to NIST standards.

Industrial Quality and Competitiveness (Page 48)

The Malcolm Baldrige National Quality Award, for which NIST developed the procedures and application criteria in conjunction with many private sector quality leaders, has been effective in focusing the attention of a broad spectrum of U.S. industry on the need for improved quality. NIST designed the criteria to represent a standard of excellence. Over 50,000 copies of the criteria have been distributed. The combined annual sales of Baldrige Award participants (Foundation supporters, applicants, examiners, companies actively preparing to compete) is about $2T. As the use of the Award criteria matures, it is expected that large companies will extend the criteria through their supplier chains, affecting hundreds of thousands of companies. The 1988 winners have presented their quality strategies to thousands of people through conferences, articles, and video productions. Quality improvement programs in both the private and public sectors are being modeled along the NIST standard.

PART I.

HOW NIST TRANSFERS TECHNOLOGY

An Introduction to NIST Outreach Efforts

NIST MISSION & TECHNOLOGY TRANSFER

- NIST is the Nation's central reference laboratory for physical, chemical, and engineering measurements

- NIST's support to industry includes:

    - measurements, standards, data and test methods
    - generic technology development
    - technology transfer

- A key driving force behind the Institute's programs is to support U.S. industry efforts in:

    - process control & quality assurance
    - industrial innovation
    - productivity
    - rapid commercialization of emerging technologies

- NIST management and scientists believe in and support the technology transfer mission throughout the Institute's programs.

Technology Competitiveness Act

The Act changed NBS to NIST, and augmented its mission, giving NIST the responsibility to:

> "assist industry in the development of technology and procedures needed
>
> - to improve quality,
> - to modernize manufacturing processes,
> - to ensure product reliability, manufacturability, functionality, and cost-effectiveness, and
> - to facilitate the more rapid commercialization...of products based on new scientific discoveries."

New technology transfer mechanisms were created to expand NIST's role in assisting industry, including:

- Regional Centers for Transfer of Manufacturing Technology

- Technology Extension Services

- Advanced Technology Program

A TECHNOLOGY TRANSFER COMPARISON OF NIST AND DEPARTMENT OF ENERGY LABORATORIES

A recent GAO study provides a statistical yardstick that indicates NIST is playing a leading role in federal efforts to develop and transfer commercially-significant technology.

- NIST
  - about 3,000 staff
  - about $280M budget
- Average DoE multiprogram lab
  - about 5,000 staff
  - about $520M budget
- Even though patent and royalty activities are, at best, only partial measures of the value of the research programs of these laboratories, it is worth noting that:

  NIST
  - each year produces 3.9 Patents/1,000 staff
  - each year brings in $34K royalties/1,000 staff

  DoE Laboratories
  - each year produce 2.6 Patents/1,000 staff
  - each year bring in $14K royalties/1,000 staff
- NIST and all of the DoE laboratories taken together have about the same number of industrial research associates (200) and host about the same number of workshops (500) each year.
- As of February 1989, NIST had entered into 37 CRDAs* (Cooperative Research and Development Agreements) under the Federal Technology Transfer Act of 1986. Since 1986, the DoE energy technology centers have negotiated 12 agreements (not under the Act).

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* CRDAs are those cooperative agreements that include pre-assigning titles or exclusive licensing rights to the collaborator. At any given time, NIST has a total of about 1100 cooperative agreements of other types.

NIST IN THE YEAR 2000: A VIEW OF THE FUTURE

1. Competition in world trade will still be a top issue for the federal government.
    - Cooperation in the U.S. among business, industry, the federal government, and state and local governments will increase.
2. A higher proportion of the federal research and development effort will go for civilian technology. It is likely that civilian R&D policy will become more focused, perhaps with a single principal spokesperson, such as DoD's role in military R&D.
3. The role of the Department of Commerce (DoC) as the lead policy advocate for science and technology having primarily commercial applications will evolve.
4. NIST will continue to provide laboratory-based support for the DoC role.
    - NIST has the flexibility to use different approaches to meet the needs of industry as technology changes.
    - Support of voluntary standards organizations in the U.S. and increased participation in the international standards arena will help to avoid non-tariff barriers to American companies in the international marketplace.
5. NIST will emphasize collaboration and cooperation with industry, and state and local technology and economic development organizations to leverage its resources.
6. NIST will make major programmatic and policy changes to serve industry better:
    - Increased efforts will be made in computers and telecommunications as well as in the biological sciences.
    - NIST will provide support for the new technologies that will be required as the concept of quality pervades the entire product cycle.
7. NIST will identify and support new emerging technologies.
    - Technology will be a critical component in U.S. competitiveness, with the highest growth rates and most rapid advances in emerging technologies.
    - The 1989, 1990, and 1991 budget requests for technical program funding in emerging technologies reflect continued interactions with industry and are focused on industry technological needs in the future.
8. Emerging technology programs at NIST will be an important element in the rapid commercialization of those technologies by U.S. firms.
    - Standards are of particular importance in emerging technologies, because early adoption of new technology depends upon industry-accepted standards.
    - Emerging technologies produce demands for new measurement techniques and new limits of accuracy and resolution.

MECHANISMS OF SUPPORT TO INDUSTRY

NIST Services and Products
Used by the Top Twenty U.S. R&D-Spending Companies *

	Calibrations	SRM	Panel Members	Conferences	Research Assoc.
1. General Motors	+	222	2	+	
2. IBM	+	227	5	+	+
3. Ford	+	21	2	+	+
4. AT&T	+	54	7	+	+
5. Dupont	+	484	3	+	
6. General Electric	+	147	2	+	+
7. Digital Equipment	+	23		+	+
8. Eastman Kodak	+	361		+	+
9. Hewlett-Packard	+	21	3	+	+
10. United Technologies	+	161		+	
11. Boeing	+	12	1	+	+
12. Chrysler		56			
13. Xerox	+	27	1	+	
14. Dow		72	1	+	
15. McDonnell Douglas	+	27		+	
16. 3M	+	257		+	
17. Johnson & Johnson	+	6		+	
18. Unisys	+	19		+	
19. Proctor & Gamble		72		+	+
20. Merck		20		+	

NIST programs and services are reaching a significant number of leading firms:

- All of the top 10 and more than half of the top 100 use NIST calibration services.
- All of the top 10, all but one of the top 50, and 90 of the top 100 use NIST standard reference materials.
- All but eight of the top 50 companies were represented at NIST conferences.
- NIST had active collaborations with, or used equipment loaned by, over 60% of the top 100 companies.
- Twenty-seven of the top 50 have placed research associates in the Institute's labs in the last 10 years.

In addition, the Institute's programs and services are especially important to smaller high-tech firms with limited R&D resources. NIST has many programs in place with such companies, and is increasing outreach efforts to them through its traditional programs as well as through new technology extension activities.

* Source: *Inside R&D*, Technical Insights, Inc., June 7, 1989.

INFORMATION EXCHANGE

Fiscal Year 1988

Technical Publications	1,904
Technical Talks	1,041
Major Conferences at NIST	93
Conference Attendees	11,907
Workshops and Seminars	440
Public Inquiries (documented)	28,670
Publication Exchange Agreements	302

- The constant exchange of information with technical colleagues in industry, universities, and other organizations is a very effective tie to the outside world. The table above shows the principal formal ways that information is exchanged.
- Numerous less-structured, one-on-one technical consultations and collaborations take place between NIST scientists and those in other organizations. Most of these interactions require little or no formal arrangement.
- Fostering the kind of institutional culture that leads to high rates of publication, participation in conferences, and collaborative relationships is recognized at NIST as a critical management responsibility.

DOCUMENTARY STANDARDS

Fiscal Year 1988

Organizational Involvements	413
Committee Memberships	1,301
Committees Chaired	127
Standards Information Queries	4,400

Participation in voluntary standards organizations such as ASTM and ASHRAE is an important way in which NIST interacts with industry.

The Institute's national center for standards and certification information maintains information on more than 240,000 documentary standards, specifications, test methods, codes and recommended practices:

- voluntary standards issued by domestic and foreign voluntary standards groups
- regional and international standards
- certification systems of 120 U.S. private sector organizations, the 50 states, and also of the federal government

SERVICES

Fiscal Year 1988

	Number	Value ($M)
Other Agency Contracts	728	90.8
Calibration Tests	13,425	6.3
Standard Reference Materials	44,484	6.4
Standard Reference Data		
- number of centers	24	
- pages of data	5,240	
Laboratory Accreditation		
- programs	10	8.7
- laboratories accredited	176	
- accreditations in process	600	

Measurement and data services provide another key linkage with the private sector.

NIST establishes and conducts laboratory accreditation programs

- as legislatively mandated (e.g., for asbestos)
- in response to industry and government requests

About 175 laboratories have been accredited; approximately 600 accreditation applications are in process.

VISITING SCIENTISTS & ENGINEERS

Fiscal Year 1988

U.S. Industrial Research Associates	205
University and College Researchers	409
Other Guest Researchers	496
Total	1,110

- 65 of the 205 industrial research associates in FY 1988 were from small businesses (32%).
- Other guest researchers include those from U.S. National labs, other federal labs, and counterpart labs and government institutes in other countries.
- NIST is a valuable training ground for future scientists/engineers, many of whom take jobs in industry.
- 24 Postdoctoral research associates received NIST appointments, and some 300 students worked at NIST last year.
- Ratio of visiting scientists and engineers to professional full-time permanent staff is approximately 2:3.

COLLABORATIVE RESEARCH

o The number of NIST collaborative research interactions with industry, government, and universities has increased in recent years:

  - The NIST research associate program has doubled since 1980.
  - Total cost sharing with industry and other non-federal government groups has more than tripled.
  - Research collaborations include partnerships with organizations in 47 states.

o Accelerated growth in the number of specific research collaborations is anticipated because of the strong NIST focus on increasing technology transfer to aid competitiveness of U.S. industry.

o A total of 1,465 research collaborations of all types were reported for FY 1988.

  - 72% are with domestic organizations
  - 38% include research associates or guest researchers
  - 23% loan or donate equipment, materials

o Collaborations with domestic organizations include:

  - 43% industrial companies
  - 29% universities
  - 13% federal agencies
  - 10% other, e.g. trade associations and professional societies
  - 4% government-owned, contractor-operated laboratories

NIST SPECIAL FACILITIES

Nuclear Reactor

Synchrotron Ultraviolet Research Facility (SURF)

Near-field Antenna Scanning Facility

Rapid Solidification Technology Facility

Automated Manufacturing Research Facility (AMRF)

Computer Standards Laboratories

Large Climatic Chamber

Tri-directional Structural Testing Facility

Large-scale Structural Test Facility

High Heat Release Rate Calorimeter

Spin Polarized Electron Microscope

Gas Flow Measurement Facility

Water Flow Calibration Facility

Cesium-137 Gamma-Ray Calibration Range

- NIST has developed many special facilities. Selected facilities, such as the reactor, have been approved for use by companies for proprietary research when these facilities represent unique national resources that are not available in the private sector.
- Users of NIST facilities do so on a first-come-first-served basis and pay the cost (labor + equipment) for operating the facility.
- New facilities are continually being added to the list.

MECHANISMS OF INDUSTRY INPUT

- Review Panels:
  - Visiting Committee
  - NAS/NRC Board on Assessment of NIST Programs
- Industrial Panels:
  - NCSL
  - CORM
- Joint Planning with Industry
- Conferences and Workshops
- Staff Exchanges
- Prof/Technical Societies:
  - IEEE
  - ACS
  - APS
- Standards Groups
  - ANSI
  - ASTM
  - ISO
- State & Local Groups
  - NCWM
  - NCSBCS
- Informal Person-to-Person Communication

Industry has many pathways to provide input and guidance on NIST programs.

NIST believes strongly in the value of its oversight committees and panels.

Internal priority-setting process is based on mechanisms including formal and informal interactions with external user groups and private sector advisors.

NIST priorities are also dependent on an iterative budget process involving the Department, Office of Management and Budget, the President, and the Congress.

PART II.

SELECTED PROGRAM IMPACT STATEMENTS

Program Area	**Pages**
Power Generation and Transmission	19, 20, 21
Electronics and Semiconductors	22, 23, 24, 25
Communications and Computers	26, 27, 28, 29
Advanced Manufacturing	30, 31, 32
Materials	33, 34, 35, 36
Chemicals	37, 38
Construction	39, 40, 41
Safety/Environment	42, 43, 44, 45
Health Care	46, 47
Industrial Quality and Competitiveness	48

SIGNIFICANT IMPROVEMENT IN THE EQUITY OF NATURAL GAS SALES

Accomplishment: NIST has completed several projects, which together have significantly reduced the uncertainty of orifice meter measurements in the metering of natural gas.

User Community: This NIST work directly impacts the metering of all natural gas pipeline operations in the United States (about $60B per year), the processing of natural gas into products such as propane and butane, and the sale and use of supercritical carbon dioxide from natural gas fields. The industry segments benefiting from the research include gas producers, national and local distributors, processors, and the millions of consumers of natural gas in the nation.

Impact: The impact of this work is estimated to translate into an annual savings of about $150M in the natural gas industry. Specific examples of the significance of these accomplishments are given below:

- Three NIST flow measurement projects have resulted in the complete replacement of a fifty year-old database for orifice discharge coefficients. The new database, developed with the American Petroleum Institute, corrects a systematic error of about 0.25% in the value of orifice discharge coefficients over their range of use.
- NIST, under the sponsorship of other government agencies, numerous industrial companies, and the Gas Research Institute, has investigated the effect of "non-ideal" conditions on the performance of flowmeters in industrial installations. NIST results on installation effects are being integrated into industry standards, to reduce the daily cost of $0.14M associated with each 0.1% of systematic error, based on the daily use of 46.5 billion cubic feet ($140M/day) of natural gas in the U.S.
- NIST, in collaboration with the Gas Research Institute, the Gas Processors Association and the Department of Energy, has provided Standard Reference Data for the constituents of natural gas and developed the capability of predicting the properties and heating values of a wide variety of natural gas and hydrocarbon mixtures. In addition, NIST has developed models for the properties of pipeline carbon dioxide, propane, and related natural gas products. These models, used to calculate the sale value of those products, are an order of magnitude more accurate than the models previously used by industry.

ELECTRIC POWER MEASUREMENTS

Accomplishment: NIST has developed techniques to measure electric power accurately in the high voltage, high current environment of the electric power industry.

User Community: The electric power industry, which consists of about 3225 utility companies and their suppliers, sells about $165 billion worth of electricity and supports an annual level of commerce in transformers and switchgear of more than $9 billion.

Impact: NIST measurements support commerce in electricity as well as electrical equipment. Examples of NIST's accomplishments include the following:

- NIST recently upgraded its electric power calibration service in response to industry's need for improved accuracy, which has stimulated the replacement of electromechanical measurement systems with recently developed electronic systems. Several meter manufacturers, including Scientific Columbus, Radian Research Laboratories, Rotek, Guildline, and Schlumberger/Weston, have introduced a new generation of meters that require NIST's capability to support accuracy claims.
- The industry estimates that it performs more than 8 million calibrations per year, all of which are supported by 130 calibrations performed annually by NIST.
- In a collaborative project, ABB Electric sent industrial research associates to NIST to convert NIST's laboratory measurements of power losses in transformers into a system easily operable by factory personnel. At present, the annual capitalized cost of these losses in transformers sold in the U.S. is about $2 billion. The desire to reduce that loss stimulated the industry to work with NIST to improve measurement technology. As a result of this government-industry collaboration:
    - ABB Electric used their improved calibration capability as part of an aggressive sales strategy and significantly increased sales.
    - Nearly two thousand copies of the document describing this system were requested by industry representatives. About 80 utilities have required the use of this measurement approach in transformer procurement specifications.
    - American High Voltage Test Systems marketed a test system based on the NIST-ABB Electric developments. This product line has subsequently been taken over by the parent company, Haefley.
- General Electric, the largest transformer manufacturer in the U.S., recently made a corporate decision to upgrade their calibration procedures and took advantage of significant consultation by NIST staff.
- NIST provides calibration support at 50 Hz, the power frequency used in Europe and much of the rest of the world, to support the export of watthour meters that utilities use to determine a customer's electric bill. Industry representatives report that about 20% of the more than $350 million annual domestic watthour meter production is exported.

NEUTRON RADIATION DOSIMETRY FOR PRIMARY STRUCTURES IN NUCLEAR POWER REACTORS

Accomplishment: NIST provides measurement assistance and dosimetry methods for assessing neutron damage in reactor pressure vessels and related reactor support structures. A cooperative agreement to strengthen quality assurance in neutron dosimetry has been implemented with Westinghouse Science and Technology Center.

User Community: The U.S. Nuclear Power Industry, including the utilities that operate over 100 commercial power reactors, represents $25B per year and over $300B in capital. NIST involvement in Nuclear Plant Life Extension (NUPLEX) activities includes interaction with industry partners, industry groups such as EPRI, other government agencies such as DoE, and professional standards committees of ASME and IEEE.

Impact: Assurance of the integrity of pressure vessels and primary reactor structures under stress from neutron radiation is crucial for the safe, efficient operation of the over 100 nuclear electric power plants. NIST provides hands-on measurement assurance, dosimetry methods standardization, and dosimetry program direction to assist the nuclear power industry in reactor pressure vessel irradiation surveillance. NIST involvement provides third-party quality assurance to measurements that will be critical in decisions affecting the fate of over $300B in capital investment, representing a potential loss of 85% of the current nuclear generating capacity of about 87GWe. Examples of NIST involvement and the impact of dosimetry include:

- NIST is assisting the Nuclear Regulatory Commission (NRC) in development of regulatory guidelines for neutron dosimetry. NIST's impartial input will facilitate industrial acceptance of guidelines.

- NIST has pioneered new techniques to perform dosimetry measurements outside of the main pressure vessel. This so-called cavity dosimetry is crucial because it allows facilities to be retrofitted for dosimetry measurements, which would be impossible if sensors had to be placed within the sealed pressure vessel. NIST cavity dosimetry techniques have been transferred to industrial users such as Westinghouse and Babcock and Wilcox (reactor manufacturers), and facilities operated by utilities such as Arkansas Power and Light, Carolina Power and Light, Pacific Gas and Electric, Florida Power and Light, and Commonwealth Edison.

- In cooperation with the Babcock and Wilcox users group, Westinghouse, and others, NIST developed LiFchips to allow measurement of gamma irradiation in the presence of neutron flux. These measurements, based on a totally new NIST technique, permit estimation of annealing of the pressure vessel and the subsequent increase in service life.

- NIST is actively pursuing dosimetry measurements for primary structures in nuclear facilities as well as pressure vessels. Failure of primary supporting structures due to neutron embrittlement has become a serious concern for aging reactor installations. NIST will soon begin structure dosimetry experiments in cooperation with Portland Gas and Electric.

ELECTROMAGNETIC COMPATIBILITY MEASUREMENTS

Accomplishment: In response to needs experienced by nearly every sector of society using electronics, NIST has developed measurement facilities and procedures that permit engineers to determine if electronic systems will operate without interfering with each other, that is if the systems have electromagnetic compatibility (EMC) with one another.

User Community: The electronics industry, with annual domestic sales in excess of $248 billion per year (1988) is critically concerned with electromagnetic compatibility for a wide range of electronic hardware and applications. The effects can range in importance from hash on television screens to automobiles that don't start, to the loss and degradation of vital data, voice, and video information in telecommunication systems, to helicopters that crash when their controls fail to respond to their pilots' commands.

Impact: Proliferation of modern electronic devices and systems has led to increasing susceptibility to interference from other electrical signals. Industry exerts a major effort to test and reduce this interference, and has adopted NIST measurement methods and systems widely to help. For example:

- At least eight U.S. companies sell test systems supporting electromagnetic compatibility measurements that are based on NIST work. In fact, the advertising literature for these systems frequently refers to them as "Crawford cells" in honor of the leader of the NIST project which originally developed these systems. The system is used universally.

- NIST methods are specified in industry's voluntary standards to test video cassette recorders, electronic devices and systems in automobiles, television receivers, and other electronic products. NIST has played a key role in the development of EMC-related compatibility standards of the Electronic Industries Association, the Society of Automotive Engineers, and the American Home Appliance Association.

- NIST has developed a number of probes to detect unwanted and unintentional transmissions of electromagnetic energy. These probes have been adapted for manufacture by several companies; in particular the Electro-Mechanics Company of Austin, Texas, markets a commercial version of a new NIST-developed probe that has much broader frequency and angular coverage than available previously.

- Some years ago, the sudden imposition by the Canadian government of regulated electromagnetic emission levels for motor vehicles threatened the U.S. market in Canada. In response, NIST helped the industry establish EMC/EMI measurement facilities traceable to national standards so that its members could demonstrate compliance and retain their Canadian markets.

- Hewlett-Packard provided a team of Research Associates to NIST to resolve open-site measurements which kept a $400 million European instrument market closed to U.S. companies. The joint project provided the test capability necessary to compete in the European market.

OPTICAL FIBER MEASUREMENTS

Accomplishment: As optical fiber technology moved from the laboratory to commercial application, NIST developed the measurement techniques and provided the technical basis for standards needed for commerce in this field.

User Community: The optical fiber and components industry is currently a $ 3.2 billion per year domestic industry with a growth rate of about 25% per year.

Impact: NIST measurement techniques have influenced this industry primarily through voluntary standards, twenty-eight of which are based on NIST work. Recent highlights of the work include the following:

- NIST provided the technical basis for the international standard for numerical aperture, which limits the amount of light that can be put into or taken out of the fiber. Prior to the adoption of this standard, NIST developments resolved a discrepancy between test methods used by the two major domestic suppliers of optical fibers.
- In cooperation with industry, NIST developed the technical basis for a new voluntary standard to measure the diameter of the core of a fiber, which influences light losses during transmission as well as at connections. NIST conducted comparative measurements of various techniques used by industry to perform this measurement and identified limitations of the various approaches.
- To meet industry needs, NIST researchers developed a new reference standard for optical fiber power calibrations that is already in heavy use by industry. The optical power output of the source is a critical performance parameter, because it determines the signal level throughout the system.
- The Group Vice President for the Information and Telecommunications Technology Group of the Electronic Industries Association has said that "Without the NIST assistance and leadership over the past eight years, the U.S. fiber optics industry would not be in the competitive position which it is today."

MEASUREMENTS TO CHARACTERIZE ADVANCED SEMICONDUCTORS

Accomplishment: NIST has developed measurements needed by the semiconductor industry for process control and to evaluate finished products.

User Community: The semiconductor device and equipment industry is a $20 billion domestic industry which is pervasive, affecting nearly every national concern. Semiconductor devices are the lifeblood of the more than $248 billion of electronics equipment sold in the U.S. annually.

Impact: NIST's contributions to this industry include:

- NIST developed a method and a Standard Reference Material (SRM) to determine the resistivity of silicon. Early studies showed that the method provided industry with savings more than 100 times greater than the cost of NIST research. During the past five years, more than 180 companies have purchased the NIST SRMs. A former vice president of ADE corporation, which has a major market share of process control systems, said "The availability of Resistivity SRMs was a significant factor in successfully developing and selling the nearly $50 million installed base of these systems." The president of Solid State Measurements, Inc. reported that their spreading resistance systems are dependent on the NIST SRMs.

- A 1982 study estimated that NIST linewidth measurement research and SRMs saved photomask-making companies $30 million per year. NIST research on linewidth measurements, used to characterize the speed and density of semiconductor devices, stimulated the production of new instrumentation, extended the range of use of microscopes, and reduced intercompany measurement errors by an order of magnitude. NIST techniques and reference standards have been adopted by major companies throughout the semiconductor industry.

- NIST developed the first system capable of nondestructively testing power semiconductor devices to their limits of failure. NASA used the system to characterize the power semiconductors in the main engine controllers of the space shuttle. Failures had occurred and replacement, once the device is installed, costs about $1 million. Now the candidate devices are tested with the NIST system before installation and the reliability is improved.

- NIST developed tests to determine the quality of the bond between the semiconductor device and the wires that connect the device to the remainder of the circuit. Based on the NIST work, industry redesigned manufacturing equipment, introduced new products, and was enabled to make large scale hybrid circuits. Production yield improvement of high reliability devices by factors of 2 to 35 were reported by various companies. Two major Department of Defense systems reported no field failures where previously bond failures were a frequent cause of failure.

- NIST developed a reference standard that allowed the industry to determine very low levels of water in the high purity gases that are required in semiconductor device manufacture. Before the NIST standard was developed, the industry had been plagued with water contamination at levels to low to detect, but high enough to degrade process yield.

- Private-sector estimates of the value of NIST work include five percent of the industry's productivity increase over a five year period and annual savings up to $500 million.

RADIATION INSTRUMENTATION STANDARDS

Accomplishment: NIST provides national leadership in the standardization of nuclear instrumentation. NIST pioneered the concept of standard instrument packages with the Nuclear Instrumentation Modules (NIM) concept, and through support of subsequent standards such as the Computer Automated Measurement and Control (CAMAC) and FASTBUS systems, has maintained the U.S. presence in an area critical to both the nuclear industry and national laboratories.

User Community: The NIM, CAMAC, and FASTBUS systems are nearly ubiquitous in the nuclear industry worldwide. The NIM system has been adopted essentially universally by facilities in the industry and national laboratories throughout the world.

Impact: The NIM and CAMAC standard instrumentation projects have resulted in a conservative estimate of savings of at least $1.9B to industrial/government users and instrument manufacturers. User savings arise from reduced spares inventories, reduced maintenance training requirements, and minimized downtime. Manufacturer savings are a direct result of NIST-supported standards and specifications, dramatically reducing design costs and risks for companies adhering to the standards. Examples of NIST involvement in radiation instrumentation standards include:

- Development of instrumentation standards by NIST, in cooperation with international standards committees such as the ESONE committee of European Laboratories, has directly enhanced U.S. manufacture of instrumentation for nuclear facilities. NIST provides impartial leadership and coordination for various specific interest groups in both the user and manufacturing communities.

- NIM, CAMAC, and FASTBUS design support by NIST benefits instrument manufacturers such as Phillips Scientific, Kinetic Systems, LeCroix Corporation, EG&G ORTEC, etc. These companies typically export as much as 50% of their products, benefitting the U.S. economic position in a multi-billion dollar industry.

- NIST provides guidance by maintaining membership on the NIM committee, currently providing the chairman of the committee. This presence encourages ready interplay between users of instrumentation, the manufacturers, and the standards committee, promoting adoption of useful standards and incorporation of changes that can be realistically accommodated by the industry.

CHARACTERIZATION OF COMMUNICATION, RADAR, AND NAVIGATION ANTENNAS

Accomplishment: NIST has developed and disseminated a technique to characterize high performance microwave antennas used for communication, radar, and navigation. The result has been significant improvement in the design, production, testing, and adjustment, and thus performance of these devices.

User Community: This work directly impacts a U.S. radio communications and detection industry that shipped $52 billion worth of products in 1988, dominated by radar, communications, and navigation equipment. Antenna production is, in itself, a $3.5 billion industry.

Impact: The NIST-developed near-field scanning method to characterize antennas has revolutionized the measurement of antenna performance. The "near-field" method predicts the signal that will occur kilometers from an antenna by making careful measurements very near it. The NIST technique provides domestic manufacturers with the most accurate antenna calibrations in the world. Specific examples of the significance of this accomplishment include the following:

- One manufacturer reduced the cost of testing antennas to be sold to the Department of Defense by $6.4 million by using the NIST measurement techniques. The Navy subsequently required that any supplier under that program use the same calibration approach.

- Eleven U.S. companies have installed 29 near-field calibration facilities with assistance from NIST. In addition, NASA has replicated NIST's facilities in four of its laboratories.

- RCA has patented a technique to use the data from the antenna calibration to set the phase shifters in a phased array antenna to optimize performance. The RCA application of the approach is being used by at least one other antenna manufacturer.

- Scientific Atlanta developed and sold software packages based on the near-field theory published by NIST.

- One company estimates that they saved $35 million in testing costs by establishing their own four near-field calibration facilities and recognized the employee responsible for proposing establishment of the facilities with a suitable bonus. The employee proposal was based on his attendance at the first NIST training workshop on the technique. A second company reports that the near field approach reduced testing time for a particular type of antenna from one month to twelve hours, leading to corresponding reduction in testing cost.

DEVELOPMENT AND IMPLEMENTATION OF STANDARDS FOR OPEN SYSTEMS INTERCONNECTION

Accomplishment: NIST leads public and private sector organizations in the specification and implementation of computer protocols based on international standards for Open Systems Interconnection (OSI). NIST leadership is stimulating a new market for interoperable, compatible network products and services.

User Community: This work impacts vendors and users of computer and communications systems. The value of shipments of computer equipment was estimated to be about $67 billion in 1989. About $1 billion of that was the local area network market which is expected to increase to nearly $6B by 1993.

Impact: International standards for OSI will overcome common problems that users of computer systems face when integrating large and small computers, networks, workstations, and communications services. The goal of the international standards is to enable systems developed by different vendors to interoperate and enable the users of different applications on these systems to exchange information.

NIST has made significant contributions to the recent progress in implementing OSI protocols and stimulating the development of interoperable products:

- NIST organized the Workshop for Implementors of OSI, an open international forum with participation by more than 200 computer manufacturers, semiconductor manufacturers, word processing vendors, process control vendors, communications carriers, and users. The Workshop develops the agreements needed to assure that products implementing the OSI standards are interoperable and compatible.
- OSINET, a cooperative government/industry research network organized by NIST, is expediting the commercial development of OSI products. With 25 participants and network nodes throughout the U.S. and in several overseas locations, OSINET is a successful research tool for remote testing of OSI protocols and the conduct of inter-vendor testing.
- In cooperation with other government agencies, NIST developed the Government Open Systems Interconnection Profile (GOSIP) to enable Federal agencies to specify OSI protocols in the acquisition of new networking systems. This specification will stimulate development and sale of interoperable OSI products by providing a market within the government.
- NIST has collaborated with industry users, such as General Motors, Eastman Kodak, and Boeing Computer Services, in developing industry OSI specifications, the Manufacturing Automation Profile (MAP), and the Technical and Office Protocol (TOP). These specifications, based on the NIST Workshop implementation agreements, establish an industry market for interoperable OSI products.
- NIST is a member of the Corporation for Open Systems, a consortium of industry vendors of network products, organized to promote the implementation of OSI standards and the testing of products.

IGES DATA EXCHANGE AMONG CAD SYSTEMS

Accomplishment: The NIST-led government/industry development of the Initial Graphics Exchange Specification (IGES) format for data in Computer Aided Design (CAD) systems has been widely adopted by industry, approved as a national standard in the U.S. and Australia, and supported by every major vendor in the field.

User Community: CAD systems are used by companies in all phases of design, analysis and manufacture of their products. Estimated at $ 5.3 billion in gross sales for 1988, the CAD industry is expanding quickly, with over 100 vendors now offering equipment. IGES was developed to allow users to be able to exchange data from one CAD system to another. The NIST-led voluntary IGES/PDES Organization is a unique collaboration among users, vendors, and government personnel involved with developing and testing IGES. The organization, including over 900 people from 360 different companies, supports a national program of standards development and conformance testing for this vital area of data exchange.

Impact: IGES is in daily production use in U.S. industry and is being invoked in many government contracts. For instance:

- Sandia Laboratories and Bendix Aerospace now send all production, mechanical engineering drawings through IGES. Lockheed in California has used IGES to transmit designs for over 6000 electrical parts. NASA has adopted IGES for all geometry data exchange in their space station definition contract. This includes all internal NASA centers in the U.S., their contractors, and their liaisons with Canada, Germany, and Japan.

- The Department of Defense is supporting IGES through its Computer Aided Acquisition and Logistics program, which developed specifications for the purchase of product descriptions in IGES format. Digital delivery of product descriptions has been mandatory in all contracts since September 1988. The U.S. Navy has called for mandatory compliance with IGES on their purchases of all CAD systems. The Navy is also making use of IGES in new procurement contracts, such as for the DDG 51 destroyer and the Seawolf submarine.

- The Society of Automotive Engineers has recently announced a national program for conformance testing of IGES implementations designed to improve the quality of data exchanges.

Thus, IGES is an example of a standard that created a climate of "technological certainty" that enhanced the pace of technology, enhanced the "transportable" character of technology, and reduced the cost of manufacturing. It especially helped the global competitiveness of small U.S. manufacturers, because these small manufacturers often lack the resources for customizing incompatible hardware and software.

NIST TIME AND FREQUENCY SERVICES

Accomplishment: NIST has developed high-accuracy time and frequency standards and has worked with industry to develop accurate timekeeping instruments for applications involving precise synchronization and frequency measurements using NIST time and frequency broadcast services.

User Community: The communications industry, e.g. radio and TV stations, to maintain their allocated frequencies; networks, to time their broadcasts; and telephone companies, to provide time services and synchronize data transmissions. The transportation industry, e.g. for railroad and air traffic operations, for automatic synchronization of traffic lights, and for sea navigation. The electric power industry, e.g. to maintain accurately the 60 Hz power frequency and to synchronize power switching in transmission grids.

Impact: NIST provides several time and frequency measurement services using satellites, radio broadcasts from NIST stations in Colorado and Hawaii, and laboratory calibration methods. These services benefit direct users and the industries that manufacture products modeled after NIST time and frequency standards, e.g. atomic clocks and radio receivers. Some highlights of the NIST Time and Frequency Standards and Services program include:

- o Automated computer time service, for use by computers and automated systems, via commercial telephone lines. Companies including DuPont, General Electric, IBM, Hewlett Packard, and others have purchased access software from NIST to use this service.

- o Joint development of timing receivers with industry, e.g. Heathkit, True Time, Spectracom, Tracor, TRAK Systems, Radio Shack, etc.

- o Commercial development of Global Positioning Satellite (GPS) timing receivers by Allan Osborne Associates, and similar receivers by Austron and Rockwell, based in part on NIST design, for satellite time coordination, synchronization of telecommunication systems, power grid switching, and NASA deep space tracking.

- o Synchronization of traffic lights in Los Angeles, using receivers developed by Precision Standard Time through interactions with NIST:
  - a $13M demonstration project of the state of California
  - 1000 receivers ordered for Los Angeles system
  - project will save 22M gallons of fuel/yr, 55K hours of driving/day
  - other cities may implement system (Dayton, Seattle, etc.).

- o Walt Disney World use of WWVB receivers for setting time in its primary computer system and synchronizing all its shows and animation sequences.

STANDARD ARCHITECTURE FOR REAL-TIME INTELLIGENT CONTROL SYSTEMS

Accomplishment: NIST has developed and disseminated a generic Real-time Control System (RCS) architecture based on work in the Automated Manufacturing Research Facility (AMRF).

User Community: This work directly impacts efforts to automate in the manufacturing, construction, and mining industries; space station telerobotics and undersea and planetary exploration; and unmanned vehicles for air, land, and undersea weapons systems. Together these areas represent more than $1 trillion per year.

Impact: The RCS architecture is in the process of being adopted by the International Standards Organization as an International Standard Reference Model for Shop Floor Control.

- A number of companies, including Boeing, Honeywell, AAI, Martin Marietta, Hughes, GM, and AT&T have collaborated with NIST on proposed applications of the RCS architecture to the next generation of controllers for machine tools, measuring machines, robots, workstations, and manufacturing cells. The market is estimated at $300 million.

- RCS has been adopted by NASA for the $800 million, space station Flight Telerobotic Servicer (FTS) program. The resulting NBS/NASA Standard Reference Model Control System Architecture (NASREM) is being used by NASA's prime contractor, Martin Marietta, for designing the FTS system in a $300 million program. NASREM is being studied by the European and Japanese Space Agencies for possible adoption by those countries.

- The U.S. Bureau of Mines has adopted the RCS architecture for its Mining Automation program. This will improve underground coal mine productivity and safety by allowing mine workers to operate machinery a safe distance from the working face.

- Martin Marietta is using RCS for the Army Field Material Handling Robot (FMR) project and the Army Teleoperated Mobile All-Purpose Platform (TMAP) program. FMR is a large robot that will improve by a factor of ten the Army's ability to handle ammunition in the field. TMAP is a remotely-controlled weapons system that will substantially improve the U.S. infantry's ability to destroy tanks without exposing American soldiers to risk.

- The Army LABCOM TEAM program has adopted the NIST RCS architecture as a control system standard for multiple semi-autonomous military vehicles, including reconnaissance, target designation, and weapons platforms. The Commander of LABCOM and the Deputy Undersecretary of Defense for Tactical Warfare have both expressed interest in using RCS as a standard control architecture for all autonomous air, land, and undersea military vehicles.

- The DARPA Advanced Submarine Technology program is studying the application of the RCS architecture to Submarine Operational Automation Systems (SOAS) aboard nuclear submarines.

ERROR-CORRECTION TECHNIQUE FOR MACHINE TOOLS

Accomplishment: NIST technique for improving the accuracy of machine tools has enabled U.S. manufacturers to penetrate the highly competitive markets for specialized measuring machine tools in both Europe and Japan.

NIST demonstrated in its laboratories that computer-controlled "error-correction" of the positional capabilities of machine tools can improve: (1) the measuring accuracies of coordinate measuring machines (CMMs) and (2) the machining accuracies of metal-cutting machine tools. What NIST did was show that imperfections in the geometry of a machine tool can be (1) measured relative to an external laser interferometer system, (2) stored as correction factors in a computer memory and (3) used during operation of the machine to correct or compensate for those positional errors. The technique was demonstrated by NIST on three types of machines in the NIST Automated Manufacturing Research Facility. Factors of 5, 10 and even 20 in the positional accuracies were obtained with no physical modification of the machines themselves.

User Community: The beneficiaries of this NIST accomplishment include both domestic producers and users of domestically-produced, precision-measuring and metal-working machine tools that operate under computer-numerical control.

U.S. producers of measuring and metal-cutting machine tools are adopting the NIST-originated technique, called "software error correction," or "accuracy enhancement" to increase the performance of their machine tools by using software to correct for any measured imperfections in the geometry of the machines. Among the users of such high-precision CNC measuring and metal-working tools are the machine tool producers themselves and their most demanding customers, including, for example, defense, aerospace, and segments of the automation industries.

Impact: The NIST accomplishment has allowed U.S. vendors of machine tools and their customers to deal more effectively with the shift in manufacturing from standardized mass production to automated production of custom-like products, that shift having given rise to a need for fast, accurate, flexible, computer-controlled measuring machines.

- According to John Bosch, VP/General Manager of Sheffield, because of the technique that they learned from NIST, Sheffield has been able to build a high-performance machine which is garnering a substantial share of new sales in Japan and Germany, homes of their major CMM competitors.
- Domestic manufacturers have adapted the NIST-developed technique in their new-generation machines, including the new Apollo CMM made by the Sheffield Measurement Division of Warner and Swasey, a Cross and Trecker Company. Domestic producers of metal-working machine tools, such as Gliddings and Lewis, are also beginning to incorporate the NIST-developed software-correction into their products.

NEW NIST REFLECTANCE STANDARDS

Accomplishment: NIST has developed an intrinsic reflectance standard based on the diffuse reflectance properties of polytetrafluoroethylene (PTFE) powder. This standard can be produced by the user laboratory following a prescribed procedure and can be utilized using NIST published data for the standard reflectance values.

User Community: The users of this standard include large segments of the U.S. medical, agricultural, food processing, paper, plastics and building materials industries; these segments of the economy produce over $50 billion in goods and services annually.

Impact: Reflectance measurements play an important role in the conservation of resources and power, ozone monitoring, space exploration, national defense, safety, communication, wearing apparel, coatings and remote sensing. The economic impact of this standard is estimated to be $500 million per year to the U.S. industry and measurement community. Examples of the impact of reflectance standards on industry include:

- The intrinsic reflectance standards have placed industrial measurements on a common base and thus enhanced process quality control procedures. For example, feedback control of high-speed color printing presses depends on diffuse reflectance measurements. Calibration of the detectors using the intrinsic standard results in better quality control and uniformity of printed material.

- Miles Laboratories has developed a UV reflectance technique to measure blood in urine that is quicker and more cost effective than previous transmittance methods. The reflectance measurements are traceable to NIST through the use of diffuse reflectance standards, as well as measurements at NIST.

- Remote sensing technology is important to climate observation/modeling, agricultural monitoring, and defense. Remote sensing measurements depend on reflectance measurements made from aircraft or satellites; these measurements ultimately must be tied to a fundamental measurement of reflectance. The availability of the NIST diffuse reflectance standard allows remote sensing measurements to be placed on a common, absolute basis.

- General Electric has developed methods to detect counterfeit currency for the Treasury Department, based on array detectors that are normalized using the diffuse reflectance standard. New, high-technology applications of reflectance measurements for pattern recognition, such as identification of currency, depend on array detectors formed from one or two-dimensional arrays of photodetectors. The diffuse reflectance standard powder, having the same intrinsic reflectance at all locations, is ideally suited to normalize such detectors.

- The ASTM is currently integrating NIST results into E-259, a method for preparation of diffuse reflectance standards.

HIGH RESOLUTION MICROSCOPY OF MAGNETIC MICROSTRUCTURES

Accomplishment: NIST has developed an instrument for providing images of the magnetic microstructure of materials, with a resolution about 100 times better than conventional imaging techniques. In cooperation with industry, this "magnetic microscope" is being used to observe details of the magnetic domain structure responsible for the performance of high technology materials used in magnetic storage devices. NIST is working with an industrial consortium to develop a second generation, commercial magnetic microscope, and has initiated a research project to improve spatial resolution by a factor of ten or more, to the atomic level.

User Community: The magnetics industry, with over $30B in sales yearly, includes computer information storage products and magnetic materials.

Impact: The NIST-developed magnetic microscope provides direct images of magnetic microstructure with a resolution of about 0.05 microns. This is done by a technique called Scanning Electron Microscopy with Polarization Analysis (SEMPA). The ability to see magnetic domains with such clarity is important to the information storage device industry. For example, the storage capacity and fidelity of magnetic tapes and disks depends upon how small magnetic "bits" can be made and how sharp the boundaries between the bits can be made. Until now, improvements have been limited by the inability to measure magnetic microstructure at the submicron level. Likewise, the performance of new, high-coercivity, lightweight magnetic alloys depends upon controlling the microscopic details of domain formation in the materials. Highlights of the NIST magnetic microstructure program include:

- NIST has established collaborations with IBM, Kodak, Westinghouse, General Motors, Honeywell, Control Data Corporation, Digital Electronics Corporation, and Perkin-Elmer.
- Over 100 U.S. companies in the magnetic recording industry and magnetic materials industry have inquired about the magnetic imaging technique, for applications including development of lightweight motors for the aerospace and automotive industries.
- NIST has assisted universities including MIT, U. Minnesota, and a large magnetics center at Carnegie-Mellon University to establish SEMPA capabilities.
- NIST has licensed to Perkin-Elmer a patent on the electron-polarimeter--the device that detects the magnetic polarization of electrons in the SEMPA technique.
- A state-of-the-art $1M instrument is being manufactured by a consortium including Perkin-Elmer, CDC, and Honeywell, for applications in micromagnetics and information storage.

MATERIALS PROPERTY DATABASES

Accomplishments: The NIST Standard Reference Data Program works with U.S. industry to provide computerized property data for engineering materials. In cooperation with industrial groups, NIST has helped establish a major online materials data system, led the way for standards development in the area of materials databases, and built some of the first databases of materials performance data.

User Community: Structural engineering materials--metals, polymers, composites, and ceramics--contribute to the economy both as primary and secondary products. In 1988, primary producers shipped over $145 billion of materials to manufacturers of secondary products. (1988 U.S. Statistical Abstract.)

Impact: During the past three years, several NIST computerized data products, emphasizing performance properties of engineering materials, have been released and adopted by U.S. industry groups.

- The Ceramic Phase Equilibria Program provides the ceramics community with evaluated data that are needed to develop most advanced ceramics. The American Ceramics Society has raised about $2.5 million in the last four years from industrial and private sponsors to support the program, and supports industrial research associates who work at NIST with Institute staff to develop and publish phase diagrams. Six volumes of data have been published to date, and four more are in preparation.

- The Corrosion Data Center was established by NIST and the National Association of Corrosion Engineers, in response to a study that showed the cost of corrosion in the U.S. to be more than 4% of the GNP. The Data Center, staffed with NIST employees and industrial research associates, develops computerized, evaluated corrosion data bases and expert systems for engineering materials exposed to a wide variety of industrial environments. Industry sponsors provide about $500K/year in support as well as guidance in the direction of the Center's programs.

- The industry-supported National Materials Property Data (MPD) Network, Inc., has adopted the NIST prototype materials data network as the basis for its system, and service is now being offered to over 35 corporate sponsors.

- The first tribology (wear and friction) information database has been completed and will soon be made available by ACTIS, Inc., also a private industry organization. In addition, NIST has provided leadership to several government agencies to work with industry in establishing ACTIS, Inc.

- Working with the MPD Network, NIST helped establish an ASTM Committee on materials databases and has led the development of standards in this area.

AUTOMATED PROCESSING OF RAPIDLY SOLIDIFIED METAL POWDERS

Accomplishment: A NIST/industry consortium is developing automated processing technology for rapidly solidified metal (RSM) powders. These powders may be consolidated into products, such as jet engine parts and advanced magnets, with exceptional properties. The new technology is expected to lead to major quality and productivity improvements in RSM manufacturing, and thus to reduced processing costs.

User Community: The U.S. market for metal powders is about $1 billion per year; the value of the products made from the powders is several times greater. RSM powders, because of their high cost, comprise the small, high technology end of the market. Their exceptional properties may provide important technological advantages in advanced materials components and systems of much greater value than the powders.

Impact: Advanced metals and alloys provide specialized properties, or combinations of properties, that cannot be obtained from conventional materials. However, because of their unique microstructures, they are difficult to form into useful shapes. When these advanced materials are made into RSM powders, they can be formed into near-net shapes by hot isostatic pressing or other consolidation techniques. The technology being developed at NIST will reduce the cost of RSM powders significantly, making them more competitive against other advanced metals and alloys. The impact of this program includes the following:

- Three U.S. manufacturers (two producers of metal powder and one user) joined with NIST in a three-year project to develop RSM powder technology. Each company contributes $75K/year to the consortium. (Two foreign producers also asked to join, but were refused by the U.S. members.)

- The consortium is developing in-process sensors that will monitor the sizes and size distributions of powder particles in real time for feedback control.

- The project is progressing toward implementing a more sophisticated form of automatic control called "intelligent processing," which will permit production of high-quality RSM powders with a virtually zero reject rate. As part of this effort, sensors are being developed that provide intensive observations of physical phenomena during the powder production process, leading to a process model that defines the relationships between the processing parameters and the characteristics of the powder.

- The RSM powder project serves as a demonstration of the technological and economic potential of intelligent processing for other materials processes, and as the basis for a greatly-expanded NIST effort in this cutting-edge processing technology.

U.S. STEEL PRODUCERS CALIBRATE WITH NIST REFERENCE MATERIALS

Accomplishment: NIST has developed and certified a series of low alloy steel Standard Reference Materials (SRMs) useful in controlling the production of quality steel and steel products. These SRMs were custom made to NIST specifications and provide more precise calibration and control of material composition than was previously possible. They were prepared after consultation with industry and certified in cooperation with industry and the American Society of Testing and Materials (ASTM).

User Community: This work directly impacts the measurements used by steel mills to control quality during production. The value of steel mill shipments for 1988 was estimated to be more than $55 billion. In addition, primary customers of steel mill products (manufacturers of automobiles, tools, industrial and structural steel) use these SRMs to verify material quality during manufacturing.

Impact: Instrumental measurement of the composition of low alloy steel is critical in controlling the production of quality steel products. This graded series of low alloy steels prepared and certified by NIST allows for more precise calibration and measurement of both desired and deleterious components in the low alloy materials.

- In February 1988, the first of these materials were certified in a cooperative effort with industry coordinated through ASTM.
- Ten analytical laboratories in the steel industry donated more than $165,000 in analytical services for the certification process
- More than 35,000 lbs of low alloy steel Standard Reference Material have been prepared to ensure long term availability and support to the steel industry.
- Since their issuance, more than 2,200 units of these seven SRMs have been sold, for almost $300,000, for the analysis of low alloy steels.

REDUCTION IN THE COST OF CHEMICAL ANALYSES

Accomplishment: NIST has developed primary aqueous calibration standards for use by industry and has developed a sub-boiling distillation apparatus for the purification of acids. These two advances have reduced expensive and time-consuming activities by providing pure reagents for critical analyses and reliable sources for instrument calibration.

User Community: This work directly impacts virtually all sectors of the economy which routinely make 250 million measurements per day, at a cost of approximately $50 billion per year. Analytical instrument sales alone, which routinely utilize calibration standards, will reach nearly $5 billion in 1989.

Impact: It is estimated that between 0.5 and 8% of GNP is directly affected by the quality of chemical measurements. Through these two improvements in analytical chemistry, NIST has been able to provide industry with a reliable source of both high-purity reagents and accurate calibration standards. Specific examples of the significance of these accomplishments include:

- The availability of high-purity acids, coupled with the improved capability to measure impurities at extremely low concentrations, has led to a revived interest by the U.S. chemical industry in providing ultra-pure chemicals for the semi-conductor industry.
- Efficient production of high-quality electronic devices depends on availability of high-purity chemical reagents. The recent availability of high-purity reagents in the U.S. is helping U.S. manufacturers to compete with Japan by significantly improving the quality, and consequently reducing the cost of production, of electronic devices.
- One major U.S. manufacturer of pure chemicals has adopted the NIST apparatus and credits its collaborations with NIST for giving them the confidence to make the investment needed to produce a new generation of "NIST grade" products.
- A new industry has begun which makes and sells standard solutions because industrial analytical chemistry laboratories find the production of these standards time consuming, and the availability of staff with the required expertise is decreasing.
- Many industrial and government laboratories, including W.R. Grace, Hershey Foods, and Oak Ridge National Laboratory are using the NIST standards to check the accuracy of commercially-available solutions for the calibration of analytical instrumentation.

DATABASES FOR THE CHEMICAL PROCESS INDUSTRY

Accomplishments: The NIST Standard Reference Data Program provides a suite of highly evaluated databases to be used in the computerization of the chemical process industries. Engineers can access a wide variety of reliable chemical data for use in computer programs that design, model, and automate chemical plants, processes, and operations.

User Community: The U.S. chemical industry produces chemicals and material worth $200B (1988 U.S. Statistical Abstract), employs more than 800,000 people (1985, ibid) and has annual net exports worth over $9B (1985, ibid).

Impact: Since World War II, the chemical industry has been one of the strongest sectors of the U.S. Economy. To maintain its international market share, the industry has turned to computers to improve plant design, quality assurance, operating efficiency, process simulation, and health and safety programs. To support this effort, the NIST Standard Reference Data Program provides high quality, reliable chemical property data.

Working with several industry consortia, NIST has recently completed major projects to evaluate data and has begun releasing the data in computer software that can easily be integrated with other computerized technology.

- Databases for industrial fluids including steam, natural gas, refrigerants, and inert gas atmospheres provide reliable data for user-specified conditions. Groups such as the Gas Research Institute, the American Petroleum Institute, and the American Society for Mechanical Engineers have supported this work and widely disseminated these data.

- The NIST Mass Spectral Database is widely used to analyze chemical product streams. A new PC version is now being used by 90 companies.

- One chemical company vice-president has estimated that a "conservative 5% could be saved on capital costs and 5% on operating costs if the data needs of the Chemical Industry were brought to a level of completeness commensurate with the advancement of other design tools." (D. Roth, in "Collected Presentations, Workshop Towards a National S&T Data Policy", Numerical Data Advisory Board, Washington, DC, April 14, 1983).

- NIST thermodynamic data forms the backbone for the inorganic chemical portion of the Chemical Industry-sponsored (via the Design Institute of Physical Property Relations - DIPPR) database. Forty chemical companies contribute a total of $750 K each year to maintain and update the DIPPR database.

CONSTRUCTION MATERIALS REFERENCE LABORATORIES

Accomplishment: NIST has organized and managed the Cement and Concrete Reference Laboratory (CCRL), sponsored by ASTM, and the AASHTO Materials Reference Laboratory, sponsored by the American Association of State Highway and Transportation Officials. CMRL promotes improvement in the quality of the nation's construction materials testing by assessing and developing test methods, supporting the development of national standards, and supporting quality control and quality assurance programs.

User Community: Concrete performance affects the owners and users of most constructed facilities, essentially every citizen. Over $4 billion worth of cement is produced annually in the U.S. and used in concrete structures valued at $20 billion. U.S. highway construction amounts to $25 billion annually.

Impact: CCRL involves 750 laboratories in the U.S., Canada and Mexico, and AMRL involves 500 laboratories in the U.S. Over 300 laboratory inspections, including examination of apparatus, observations of tests, and oral and written reports, are conducted annually. Over 1500 laboratories participate in proficiency programs that compare their testing quality using results of standard tests on uniform samples. Many organizations, such as the Corps of Engineers and State Highway departments, require their quality assurance laboratories to participate in the CMRL.

- CCRL contributed to development of ASTM Standard C1077-87, "Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation," and in 1988 revised its program to implement the standard.

- NIST developed a calibration method for dynamic road roughness measurement devices implemented by AMRL and AASHTO in 1989. The Federal Highway Administration and state agencies use the information provided by these devices to develop quality assurance standards in highway construction.

- AASHTO established in 1989 a laboratory accreditation program for quality assurance in highway construction. AASHTO's accreditation decisions use AMRL inspection reports as technical bases.

PLUMBING STANDARDS

Accomplishment: NIST has conducted analytical, laboratory, and field studies of demands for plumbing services and the hydraulic performance of plumbing fixtures, drains and vents. Results have been incorporated into national standards and model codes, and referenced in building codes, to save potable water, reduce demands for waste water treatment, and reduce costs of plumbing systems.

User Community: Users include the multibillion dollar plumbing equipment industry, designers, and contractors, as well as most citizens who use plumbing and pay for water supply and sewage treatment.

Impact: Water conservation is becoming increasingly critical as water supply constrains urban development in many areas of the U.S. NIST has developed a computer-based design procedure for the drain-waste-vent system that accounts for the transient transport of liquids and solids, water supply requirements, and drainage loads reflecting the performance of water-conserving fixtures, and test procedures for the performance of water-conserving fixtures. As a result of the NIST work:

- The 1986 One and Two Family Dwelling Code of the Council of American Building Officials adopted NIST recommendations for drainage loads and sizing of water supply, drainage and vent piping. The National Association of Home Builders estimates these provisions provide a savings of $500 in a typical home, primarily in reduced material costs. That is $500 million annually for normal production of homes to which the Dwelling Code is applicable. Further savings to individual homeowners will accrue from water savings, and urban development will be less constrained by limited water resources.

- American national plumbing standards have adopted NIST recommendations for test procedures for water-conserving fixtures and transport of wastes through plumbing systems. The Model Plumbing Code of the Building Officials and Code Administrators, International has adopted NIST recommendations for sizing of water supply and venting.

THERMAL INSULATION MEASUREMENTS

Accomplishment: NIST has developed measurement methods and devices for the performance of thermal insulation for buildings, provided technical bases for insulation standards and test methods, and provided reference samples for calibration of industrial insulation measurement devices. These technologies are essential to energy conservation in buildings and the durability of walls and roofs.

User Community: About 40% of the nation's energy is used in buildings for heating, cooling, lighting, and related purposes. The performance of thermal insulation influences much of this energy use, across all sectors of the economy. The mineral wool segment, alone, of the insulation industry amounts to $3 billion in sales annually.

Impact: In response to the 1978-79 proposal of the Federal Trade Commission requiring manufacturers to label products for thermal resistance, NIST developed the 1 meter guarded hot plate, the world's first device capable of direct measurement of thermal resistance of insulation at practical thicknesses of 150 to 400 mm. The instrument uses a NIST-invented concept that is uniquely capable of modeling temperature variations over the measurement surfaces. NIST recently commissioned a calibrated hot box with dynamic control of temperature, humidity and pressure conditions on each side of wall specimens 3 by 4.6 meters in size.

- The U.S. Chamber of Commerce has testified that availability of reference samples from the 1 meter guarded hot plate saves $90 million per year in manufacturing costs by providing better quality control of insulation properties during production, allowing manufacturers to meet Federal guidelines at minimum cost.

- Two new NIST standard reference materials for calibration of industrial insulation measuring devices were produced in 1988 using the 1 meter guarded hot plate, and were made available for sale in early 1989.

- ASTM is now considering adoption of a standard dynamic test procedure for building wall elements, based on NIST studies on methods for characterizing calibrated hot boxes.

STRUCTURAL FAILURE INVESTIGATIONS

Accomplishment: NIST has investigated structural performance in natural disasters, conducted condition assessments of important structures, and investigated structural failures of substantial technical or public policy importance. Examples include: Hurricane Camille, 1969, showed needs to improve wind design standards; San Fernando Earthquake, 1971, revealed needs to improve seismic design and construction standards; Kansas City Hyatt Regency Hotel skywalks, 1981, showed needs to improve quality in design and construction; U.S. Embassy Office Building in Moscow, USSR, 1987, revealed serious, but repairable structural deficiencies; and Ashland Oil Tank Collapse, 1988, revealed deficiencies in regulations and enforcement and need for an NDE method to assess fracture toughness of existing tanks.

User Community: Construction is one of the largest U.S. industries; in 1988 it amounted to $401 billion, 8.4% of GNP. Moreover, constructed facilities shelter and support most human activities; their quality affects the productivity of all U.S. industry and the safety and quality of life of every citizen.

Impact: In recognition of the significance of prior NIST investigations of structural performance, the NBS Authorizing Act for FY 1986 specifically authorizes NBS (now NIST) investigations of structural failures.

- In response to deficiencies in practice revealed by NIST investigations, and using followup research by NIST and other laboratories, the American Society of Civil Engineers' standard "Minimum Design Loads for Buildings and Other Structures" incorporates updated provisions for wind and seismic loadings and load and resistance factors.
- In response to NIST's findings in the Hyatt-Regency skywalks investigation, and with active participation by NIST staff, the Engineering Foundation convened a Structures Failures Conference in 1983 which recommended definition of responsibilities for quality in the constructed project, and the American Society of Civil Engineers organized a project to produce a Manual of Professional Practice for Quality in the Constructed Project in 1988.
- At the request of Congress, NIST studied the cause and consequences of the Ashland Oil Tank Collapse. NIST's recommendations, and participation with the relevant committees, were used in revising regulations proposed by EPA and standards proposed by the American Petroleum Institute. NIST's recommendations to seek fail-safe behavior through adequate fracture toughness of base metal were featured by *Materials Evaluation* magazine.

SEISMIC DESIGN AND CONSTRUCTION STANDARDS

Accomplishment: NIST is one of the four lead agencies of the National Earthquake Hazards Reduction Program (NEHRP) which was mandated by Congress in 1977. Under the program, NIST provides research and technical support for the development of improved seismic design and construction practices.

User Community: A large earthquake striking an inadequately prepared U.S. metropolitan area can cost tens of thousands of lives and tens of billions of dollars in property damages. The insurance industry estimates, for example, that a magnitude 7.5 earthquake on the Newport-Inglewood fault near Los Angeles would cause 17,000 deaths and $50 billion in insured property losses. Larger additional losses would arise from uninsured damages and interruptions in productive activities. Thirty-nine of the fifty states have substantial earthquake hazards.

Impact: NIST has conducted post earthquake investigations, and laboratory and analytical research to provide technical bases for improved seismic practices, and provided technical support to private and governmental organizations responsible for the development and enforcement of seismic design and construction practices:

- Post-earthquake investigations with substantive technical reports include: San Fernando 1971, Managua 1972, Guatemala 1976, Bucharest 1977, Miyagi-ken-oki 1978, Imperial Valley 1979, Mexico City 1985, Whittier Narrows 1987 and Armenia 1988.

- NIST has developed unique facilities to study the behavior of structural components in earthquakes. These testing facilities are capable of testing specimens up to 60 ft tall with lateral displacements up to 24 in. Studies of full scale, reinforced concrete bridge columns reported in 1989 confirm the improved performance of columns constructed to recent standards, and show that reinforcement can be made more economical without degradation of seismic performance.

- NIST planned the development of 1988 NEHRP Recommended Provisions for the Development of Seismic Regulations for New Buildings and provided technical support to the Building Seismic Safety Council (BSSC) in their development. BSSC is composed of about 60 professional, technical, and trade organizations concerned with seismic safety. Trial designs have shown the effectiveness and economy of the Recommended Provisions for all parts of the U.S. The Recommended Provisions are being incorporated in national standards and model building codes, and used in State and local building codes.

ALTERNATIVE REFRIGERANT TECHNOLOGY

Accomplishment: NIST has developed technologies to identify new, environmentally benign or more efficient refrigerants and refrigerant mixtures. NIST is providing property measurements for these new refrigerants, and evaluating alternative refrigeration cycles and systems that will operate efficiently with the new materials.

User Community: U.S. production of Chloro-Fluoro-Carbons and CFC related products (insulation, air conditioners, heat pumps, etc.) amounts to $28B annually. NIST is working with the Air Conditioning and Refrigeration Institute to develop property and performance data for alternative refrigerants, and with the Electric Power Research Institute and industrial partners to study alternative refrigeration cycles.

Impact: Public concern for the ozone layer resulted in the Montreal Protocol in 1987 for reduction in the use of CFCs, and further concerns about the greenhouse effect have placed new emphasis on more efficient refrigeration to cut energy use and the related production of CO_2. U.S. leadership in alternative refrigerants and products using them will preserve this market for U.S. industry, as well as open larger international markets.

- NIST identified candidate alternative refrigerants that are nonflammable, environmentally benign, and have low toxicity. Published in the December 1987 ASHRAE Journal, this paper won ASHRAE's Best Paper Award.

- Efficiency improvements of over 30% have been shown in the NIST breadboard heat pump facility, using new refrigerant mixtures compared to conventional single component refrigerants. Using refrigerant mixtures promises new refrigeration cycles and improved efficiency, but application has waited due to lack of design data.

- NIST reported in 1989 the thermodynamic and transport properties of new refrigerants, allowing industrial engineers to design refrigeration cycles for the new materials. NIST will release these data in computer accessible forms through the Office of Standard Reference Data, allowing industry to generate tables and graphs needed for equipment design.

- NIST will soon execute a three-year cooperative research agreement with EPRI and one of the three largest U.S. refrigeration equipment manufacturers. NIST will conduct laboratory tests of new refrigerant mixtures in commercial equipment, and the industry partner will evaluate the performance results using a commercial economic model.

SMOKE DETECTOR PERFORMANCE

Accomplishment: NIST developed performance requirements and installation guidelines for smoke detectors. The requirements formed the basis of Underwriters Laboratories (UL) and International Standards Organization (ISO) Standards, and the installation guidelines are used in all model building codes requiring smoke detectors in the U.S. (and some foreign countries). The resulting smoke detector performance improvements have stimulated sales and prompted the installation and acceptance of smoke detectors as a primary means of fire protection.

User Community: The work has benefitted 80% of homeowners in the U.S. Smoke detector manufacturers have benefited from a major U.S. and export market and the building industry has been able to provide improved and more reliable fire protection.

Impact: The NIST-developed smoke detector performance requirements, installation guidelines, and subsequent studies have helped establish a $100 million U.S. residential smoke detector market and enabled U.S. manufacturers to acquire a 50% share of the world market. Specific examples of the significance of this work include:

- This work formed the basis for the UL standards for residential and commercial detectors. It is also contained in the National Fire Protection Association (NFPA) Standard, all of the model building codes, and all federal, state, and local laws requiring residential detectors in the U.S. (and some foreign countries).

- Articles in such publications as *Parade*, *Readers Digest*, *Popular Science*, and *Consumer Reports*; and a segment on the *Today* show brought 17,000 letters to NIST from viewers. This publicity, coupled with NIST's technological advances, resulted in greatly increased demand, lower prices, and legislated installations. Estimated annual sales of residential detectors went from about 250,000 in 1972 to 14,000,000 in 1978 and are now stabilized at about 8,000,000. Because European manufacturers were unable to supply growing European demand, the U.S. manufacturers captured the vast majority of European sales--often representing the first export opportunity for these companies.

- In the past 15 years, the fraction of U.S. housing protected by at least one smoke detector has reached an estimated 80%, which has been the major factor in the 30% reduction in residential fire deaths during that period.

- In a collaborative program with Underwriters Laboratories and the Signaling Systems Section of the National Electrical Manufacturers Association (NEMA), NIST completed a major field of study of false alarms from smoke detectors installed in hospitals. This study makes numerous recommendations for improving detector system performance

- NIST developed the only smoke detector sensitivity tester which can make quantitative measurements on any detector type or model, while the detector is still in place. This device is manufactured and sold by a small company in California.

- NIST also developed a low cost fit tester for industrial respirators. The apparatus uses a smoke detector as the measuring device, and can be produced for about $500, compared to the $10,000 price for the current equivalent. This apparatus could reduce the economic burden to smaller companies in assuring proper fit of respirators used to protect workers.

THE U.S. RADIOPHARMACEUTICAL INDUSTRY MEASUREMENT ASSURANCE PROGRAM

Accomplishment: NIST has established a national measurement assurance program to support the growing radiopharmaceutical industry, based on NIST standards, measurements, and SRMs for short-lived radionuclides. The measurement-assurance program is nearly self-supporting, as the industry provides Research Associates at NIST through the sponsorship of the U.S. Council for Energy Awareness.

User Community: The entire network of pharmaceutical producers, and the key distributors and equipment manufacturers, rely on NIST Standard Reference Materials of the short-lived radionuclides as a central element of their quality control. One patient in four admitted to a hospital in the U.S. is injected with a radiopharmaceutical. These procedures are primarily in nuclear-medicine diagnostics such as heart and tumor imaging.

Impact: The U.S. radiopharmaceutical industry, with annual sales of $300M, is growing at almost $20M/year, but acceptance of new products depends on safe and accurate application of these materials. Measurement discrepancies as large as 20%, common in the early 1970s, have been substantially reduced through measurement quality assurance programs, supported by NIST reference materials and measurements. Because many of the radionuclides of interest have short lives, an ongoing program must be in place to trace commercial measurements back to standards. Many standards issued under the NIST measurement quality assurance program are issued several times annually. Examples of the industrial impact of the NIST program include:

- Acceptance of new radiopharmaceutical products by the FDA depends in part on the ability of the producer to have a continuing, demonstrated measurement capability for the compound of interest. Members of the NIST measurement assurance program can maintain measurement traceability to NIST standards on a continuing basis, critical for short-lived radionuclides.

- Through the measurement assurance program, NIST assists major pharmaceutical suppliers such as DuPont/New England Nuclear, Medi-Physics, Squibb Diagnostics, and Mallinckrodt; quality control laboratories of the FDA, nuclide suppliers such as DuPont and Nordion, and Syncor, a national nuclear pharmacy responsible for supplying unit doses to hospitals through 80 distribution centers in the U.S.

- Radiopharmaceutical companies depend on the early availability of national activity standards to expedite FDA approval of new products. The special measurement services, measurement data, and access to standards provided by NIST promote commercialization of new products based on industrial research.

SUPPORT FOR CLINICAL MEASUREMENTS AT NIST

Accomplishment: NIST has developed a series of highly accurate and precise methods to analyze for serum constituents. These methods, recognized by the international clinical laboratory community as "definitive," are used to certify human serum reference materials issued by NIST and the College of American Pathologists (CAP). NIST also provides the clinical laboratory community with pure, crystalline materials to serve as primary standards for calibration. The CAP, which runs the largest clinical proficiency testing program, sponsors a reference laboratory and two research associates at NIST to assist in these efforts and to assign concentration values to reference solutions provided by the CAP. NIST is now actively developing new reference materials for drugs of abuse in urine, in cooperation with the CAP.

User Community: Reference materials certified at NIST are used by leading manufacturers of clinical analyzers and by more than 25,000 hospitals and clinical and forensic laboratories to calibrate their instrumentation and/or validate their measurement methods.

Impact: Health care measurements represent 2% of the U.S. GNP. Examples of the impact of NIST reference materials on the clinical community and, ultimately the quality and cost of health care in the U.S. include:

- The introduction by NIST of a pure crystalline cholesterol and a series of reference serum pools with known cholesterol concentrations has led to a steady improvement in the accuracy of cholesterol measurements in clinical laboratories and thus, to fewer misdiagnoses and repeat tests. These materials and NIST analytical methods form the accuracy base for the current National Cholesterol Education Program to reduce coronary disease risk.

- A definitive analytical method for sodium and potassium has been used to validate the use of ion selective electrodes (ISE) for clinical measurement of these analytes. This has allowed clinical laboratories to reduce the cost of these tests significantly. Supporting research has been carried out by a research associate at NIST, sponsored by several leading manufacturers of clinical instrumentation, including Eastman Kodak, Ciba-Corning, Amdev, Nova Biomedical, and Instrumentation Laboratory.

- As a result of increased efforts to screen individuals for use of illegal substances, laboratories performing the tests must maintain public confidence. These laboratories are implementing strict quality assurance programs that include the use of accurate reference materials from NIST. The first such material, for the major metabolite of marijuana in urine, is now in wide use. The Naval laboratories involved in drug testing use this standard reference material (SRM) regularly to validate their calibration procedure.

MALCOLM BALDRIGE NATIONAL QUALITY AWARD

Accomplishment: NIST has developed the procedures and application criteria for the Malcolm Baldrige National Quality Award in conjunction with many private sector quality leaders. NIST designed the criteria to represent a standard of excellence. Over 50,000 copies of the criteria have been distributed.

User Community: Many manufacturing and service sectors are interested in the Award and in the quality strategies of the winners. NIST works with many trade and professional associations to promote the award purposes.

Impact: The combined annual sales of Baldrige Award participants (Foundation supporters, applicants, examiners, companies actively preparing to compete) is about $2T. As the use of the Award criteria matures, the large companies will extend the criteria through their supplier chains, affecting hundreds of thousands of companies. The 1988 winners have presented their quality strategies to thousands of people through conferences, articles, and video productions. Quality improvement programs in both the private and public sectors are being modeled along the NIST standard. Indications of growing interest include:

- Many companies, such as the Union Pacific Railroad, are setting up quality systems modeled on the NIST criteria. Other companies are creating inhouse quality awards based on the NIST criteria, and have begun to use the Award materials as a basis for improving supplier quality.
- Feature articles will appear in *Electronic Business* (October) and the *Training and Development Journal* (ASTD - Sept.). Hundreds of articles have appeared in a wide range of publications.
- The Presidential Award for quality in the Federal government is based on the Baldrige criteria. Also, the Federal Quality Institute works with NIST on developing Federal programs. NIST has assisted many Federal agencies and Departments: IRS, Social Security Administration, Department of Education, and Federal Aviation Administration.
- The DoD is working with NIST on procurement models. The Deputy Secretary of Defense has described the Baldrige Award criteria as a "model of competitiveness." The Defense Manufacturing Board has established a special Baldrige Award Task Force.
- States (CT, CA, MN, for example) and regions use the NIST criteria and consult with NIST staff to help fashion state awards and programs in quality and productivity.
- Robert Galvin, Chairman of Motorola, has said that if all U.S. companies followed Baldrige Award criteria, GNP would be increased by at least 1/2 of 1 percent.
- International interest has been expressed by the European Foundation for Quality Management and by Japan (translation of criteria into Japanese).

PART III.

INDUSTRIAL INTERACTIONS SUMMARIES

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Center for Building Technology

Program Description:

Performs analytical, laboratory and field research in structural, materials and mechanical engineering, and materials, lighting, and information sciences dealing with the performance of constructed facilities and the construction process. Produces methods to predict, measure and test the performance of construction materials, components, systems and practices.

Principal Services Provided to Industry and Commerce

Recommendations for standards; measurement and test methods; cooperative research; consultation; inspections of laboratories; performance investigations.

Principal Modes of Interaction:

Participation in voluntary standards and technical committees, participation in and co-hosting of conferences and workshops, laboratory visits and exchanges, and cooperative research.

Cooperative Research Projects with Industry:

Construction Materials Reference Laboratories - ASTM and AASHTO.
Earthquake Engineering - Building Seismic Safety Council.
Performance of Roofing Membranes - National Roofing Contr. Assoc.
Lighting Technology - Lighting Research Institute.
Refrigerants and Refrigeration Cycles - EPRI, Carrier.
Automatic Controls for Buildings - ASHRAE, Johnson Controls.

Notable Accomplishments of Importance to Industry or Commerce:

Investigation and public report on the physical causes of major structural failures, including the Ashland Oil Tank collapse of January 1988.

Research and technical support for the development and application of nationally applicable, cost-effective seismic design and construction provisions for buildings and lifelines.

Research basis and recommendations for first national standards for membrane roofing systems.

Laboratory inspection and proficiency sample programs to assist 1500 North American laboratories responsible for quality assurance in construction and provide technical bases for AASHTO's new laboratory accreditation program.
Innovative measurement device for thick thermal insulation provides reference specimens saving U.S. manufacturers $90 million annually.

Novel test methods for automated building control systems and for translators for automatic exchange of construction information.

A systematic approach for the identification of alternatives to refrigerants that attack the ozone layer and developed methods to model the performance of refrigeration equipment that uses innovative refrigerants.

Center for Computing and Applied Mathematics

Program Description:

Conducts research and supports NIST programs and other Federal agencies in selected fields of mathematics, statistics, and scientific computing. Operates central computing, network, and communications facilities and services.

Principal Services Provided to Industry and Commerce:

Cooperative research; consultation; scientific software.

Principal Modes of Interaction:

Conducting seminars and workshops for industry groups; voluntary standards committee work; visits to and from industry; professional society activities to promote quality and productivity; technical publications.

Cooperative Research Projects with Industry:

Advanced ceramics for cutting tools - ISCAR Ceramics, Inc.

Computational mechanics applied to Non-Destructive Evaluation - Indust. Quality, Inc.

Economic analysis of heat pumps - EPRI and Carrier Corp.

Mathematical modeling of semiconductor devices - GM Research Labs.

Notable Accomplishments of Importance to Industry or Commerce:

NIST statistician was a key participant in an international study to determine a calibration factor for oxygen concentration in silicon wafers.

AutoMan, decision-support computer software for economic evaluation of qualitative and quantitative factors related to investment in automated manufacturing systems, was developed and disseminated.

Center for Electronics and Electrical Engineering

Program Description:

Provides generic measurement capability in the interrelated areas of electronics, optoelectronics, electromagnetics and electrical engineering. Conducts research and provides measurements in electronic and electrical materials, devices, instruments, and systems; develops engineering data, measurement methods, theory, physical standards, and associated technology, and provides technical services, reference standards, and measurement traceability to primary national standards.

Principal Services Provided to Industry and Commerce:

Measurement and calibration services; cooperative research; measurement method development; engineering data; national reference standards; standard reference materials; physical standards; consultation.

Principal Modes of Interaction:

Through calibration and measurement services, joint research and development programs, publications, training workshops, voluntary standards, conferences, and visits to and by industrial representatives.

Cooperative Research Projects with Industry:

Microwave Monolithic Integrated Circuit Consortium -- Cascade Microtech, Inc. ITT Defense and Gallium Arsenide Center; TRW Electronic System Group.
Transformer Loss Measurements -- ABB Electric, General Electric.
Dielectric Insulation Materials -- Electric Power Research Institute, Empire State Electric Energy Research Corp.
Power Frequency Electric and Magnetic Fields -- Electric Power Research Institute.
Integrated Circuit Test Structures -- IBM.
Precision AC Voltage Sources -- Hewlett-Packard; Lockheed Missiles and Space Company, Fluke.
Optical Current Transformers -- Westinghouse, 3M, Photon Kinetics, Optra.
Josephson-Junction Voltage Sources -- Hewlett-Packard, Lockheed, HYPRES.
Antenna Development -- Denver Research Institute, The Electromechanical Corporation.
Doping Profiles -- Solid State Measurements Inc.
Thermal Measurements in Semiconductors -- Raytheon.
Safe Operating Area of Power Semiconductors -- Siliconix, Unitrode, Honeywell.
Ion Implantation -- Boeing Electronics.
Synchrotron Radiation -- IBM.
MOS Capacitors -- Westinghouse.
Data Converter Evaluation -- Gould/Martin Marietta.
High Frequency Impedance Standards -- Hewlett-Packard.
Inductive Voltage Dividers -- ESI/Ballentine.
Transconductance Amplifiers -- Guildline, Inc.
Conducted Electromagnetic Interference -- General Electric; TII IndustriesPass & Seymour; General Semiconductor Industries; Current Technology, Inc.; EDCO; and the Electric Power Research Institute.
Contacts to High Temperature Superconductors -- Hughes, Westinghouse.
AC Susceptometer -- Lakeshore Cryotronics.
Hyperconductors -- Westinghouse, Alcoa.

Measurements on High Temperature Superconductors -- Ball Communications, Kodak, GE.
Magnetic Measurements (including Magnetism of Inconel) -- Rockwell.
Geometrical Measurements on Optical Fibers -- AT&T.
Superconducting A/D Converter -- Westinghouse.
Niobium Trilayer Fabrication -- Ball Aerospace.
Commercial Josephson Junction Array Voltage Standard -- RMC, Quantum Design.
Development of Microwave Calibration Services -- Wiltron Corporation, Hewlett-Packard.
Microwave Power Standards -- John Fluke Company.
Measurement of the Permeability -- Boeing.
Attenuator Evaluation -- Hewlett Packard.
Thermistor Mount Power Standards -- Hughes Microwave Products Division.
Time Domain Measurements -- HYPRES, Picosecond Pulse Laboratories, Inc.
Permittivity of Fluoride Glass -- SpecTran Corporation.
Permittivity Measurements of Fused Silica -- Martin Marietta Corporation.
Electromagnetic Field Probes -- Luxtron.
Electromagnetic Field Measurements -- Ball Aerospace Corporation, Rantek, Tektronix, and IBM.
Standard Field Radiators -- DEC.
Electrostatic Discharge -- IBM.
Antenna Beam Pointing Accuracy -- Hughes, COMSAT.
Near Field Scanning -- Westinghouse, General Electric.
Circularly-Polarized-Antenna Standards -- COMSAT.

Notable Accomplishments of Importance to Industry or Commerce:

Developed and disseminated a near-field technique to calibrate antennas which has been adopted by industry.

Developed test cells, called transverse electromagnetic field or TEM cells, which are now commercially available and widely used for electromagnetic compatibility tests.

Developed an ultra-broadband isotropic electric field probe that is commercially available and used in the assessment of electromagnetic interference.

Developed a 10-volt Josephson array voltage standard which was used by industry to verify the performance of a new generation of precision instruments.

Developed the superconductor wire standards which are used in the procurement of superconducting magnet wire.

Contributed important technical information to support twenty-eight voluntary standards for optical fiber technology which have been adopted by the industry.

Developed the standardized artifacts which industry uses to determine the thickness of the layers of the various materials used in semiconductors.

Provided the industry with the standardized artifacts used to determine the resistivity of the silicon wafers used to make integrated circuits.

Developed and disseminated the first test system to test nondestructively power semiconductors to their limits of failure.

Provided the research results used in three industry draft standards on electromigration of integrated circuit structures, parts of these standards are already in widespread use in industry.Developed and disseminated the reference artifacts that the semiconductor industry uses to determine the width of the structures which make up integrated circuits.

Assisted industry adapt to the adjustment of units of voltage and resistance that was required to achieve worldwide uniformity.

Developed and disseminated techniques to measure the electric and magnetic fields produced by the electric power transmission system.

Developed techniques, widely used in industry today, to measure the power losses in transformers.

Developed the modern calibration service required to test the new electronic watthour meters to the limits of their accuracy. Watthour meters measure more than $165 billion annually.

Developed a novel technique to produce electrical signals with a known phase relationship which has been commercialized by three different manufacturers.

Developed a new test procedure to determine the influence of conducted electromagnetic interference which provides greater acceptability of U.S. products in the world market.

Developed measurement methods and technology for ultrasonic wire bonding used universally in the semiconductor industry.

Developed methods, artifacts, and standards for measuring thermal properties of semiconductor devices and packaging. The NIST developments have been incorporated into the industry's voluntary standards.

Center for Fire Research

Program Description:

Performs and supports research on all aspects of fire. Develops scientific and technical knowledge applicable to the prevention and control of fires; includes research on the fundamental processes at work in fires and on the factors affecting risk and victims of fire. Performs tests, demonstrations and investigations in support of such activities.

Principal Services Provided to Industry and Commerce:

Measurement method development; co-operative research; reference data; consultation; analytical method development.

Principal Modes of Interaction:

Through participation in industrial and professional scientific, engineering, and standards associations; grants and contracts; and visits to and by industrial representatives.

Cooperative Research Projects with Industry:

Roof Vent Fire Performance - American Architectural Manufacturers Assoc.
Modeling of Compartment Barriers - Portland Cement Association.
Smoke Control System Performance - American Society of Heating, Refrigeration, and Air Conditioning Engineers.
Wall Covering Flammability - American Textile Manufacturers Institute.
Carpet Test Methods - Carpet and Rug Institute.
Fire Risk Estimation - National Fire Protection Research Foundation (about 30 private sector members).
Smoke Generation and Toxicity - International Copper Research Association, Society of Plastics Industries, American Textile Manufacturers Institute, American Fiber Manufacturers Association, Sleep Products Safety Council, Carpet and Rug Institute.

Notable Accomplishments of Importance to Industry or Commerce:

The Center for Fire Research has developed and released HAZARD I, a method for predicting the hazards to the occupants of a building from a fire therein. HAZARD I includes a set of computer disks containing the software necessary to calculate fire hazard. Sales of HAZARD I indicate applications will include material/product performance evaluation, fire reconstruction and litigation, fire department preplanning, and extrapolation of fire test data.

The Center has developed two pieces of apparatus which provide data critical to predicting the fire hazard of a product from a small sample of material. The first, known as the NIST Cone Calorimeter, measures rate of heat release, time to ignite, and the smoke and toxic gases produced. It won an IR100 Award and is now produced by two U.S. manufacturers. The second, known as the NIST LIFT apparatus, measures the ignition temperature and lateral flame spread rate on vertical surfaces.

Center for Manufacturing Engineering

Program Description:

Conducts research and development in the fields of mechanical metrology, precision engineering, automation and control technology, robotics, and industrial and manufacturing engineering to support the discrete parts manufacturing industries; develops measurement methods particularly suited to the automated manufacturing environment as well as traditional mechanical measurement services; develops the technical basis for interface standards between the various components of fully-automated discrete part manufacturing systems.

Principal Services Provided to Industry and Commerce:

Measurement method development; measurement and calibration services; national reference standards & materials; co-operative research; transfer of advanced manufacturing technology; consultation.

Principal Modes of Interaction:

Calibration and measurement services; cooperative research; technical committees; conferences; AMRF open houses and tours; Manufacturing Technology Centers.

Cooperative Research Projects with Industry:

Integrated Computer Vision System - Martin Marietta Baltimore Aerospace.
Emerging Discrete-Part Manufacturing Systems - Arthur Andersen and Company.
Advanced Automated Manufacturing Technology - Warner and Swasey Company.
Submicrometer Linewidth Metrology - Texas Instruments.
Development of the Next Generation Machine Tool Controller - Hurco.
Accuracy Enhancements of Coordinate Measuring Machines - CMX, Co.
Object Oriented Data Management Systems - Ontologic, Inc.
Product Data Exchange Specification (PDES) Test Bed Project - IBM.

Notable Accomplishments of Importance to Industry or Commerce:

At the joint initiation of DoD/NASA and a consortium of computer aided design (CAD) manufacturers and users, CME led the rapid development and adoption of the national CAD interface standard: the Initial Graphical Interchange Specification. CME has also led the development of the next generation of this standard, the far more comprehensive Product Data Exchange Specification.

CME developed the Automated Manufacturing Research Facility, a research test bed that provides a basic array of manufacturing equipment and systems that researchers from NIST, industry, and academia use to study new methods of measurement and quality control for flexibly automated factories.

Center for Analytical Chemistry

Program Description:

Develops and maintains the scientific competences and experimental facilities necessary to provide the Nation with uniform measurements, measurement methodology, and measurement services in the field of analytical chemistry; carries out basic and applied research in analytical chemistry; and develops and improves methods for the separation, analysis, and characterization of materials, including Standard Reference Materials.

Principal Services Provided to Industry and Commerce:

Standard reference materials; special service analyses; calibrations; workshops/symposia/courses.

Principal Modes of Interaction:

Cooperative research; consultations; standards committees (109 separate committees).

Cooperative Research Projects with Industry:

Definitive Methods in Clinical Chemistry - College of American Pathologists.
Heavy Duty Motor Vehicle Emission Standards - Motor Vehicle Manufacturers Association.
Volatile Organics in the Atmosphere - American Petroleum Institute.
Electrophoretic Imaging - Bio-Image Inc.

Notable Accomplishments of Importance to Industry or Commerce:

CAC has conducted 20 QA courses and 75 seminars on "Quality Assurance of Chemical Measurements" for industry, academia, and other government agencies. The quality assurance of chemical measurements is important to virtually all U.S. manufacturers, who ultimately use these measurements to assure the quality of their final products.

CAC is organizing an industry/government agency consortium on the automation of organic and inorganic analytic laboratory methods (CAALS). The Consortium will promote active industrial involvement and accelerate the transfer of technology to member firms.

Center for Atomic, Molecular and Optical Physics

Program Description:

Measurement methods are developed to investigate the atomic, molecular, and optical properties of matter and relate them to the physical and chemical behavior of materials. Related measurement standards, services, and data centers are provided. A major synchrotron radiation user's facility is operated for AMO physics, surface science, and uv and soft x-ray radiation metrology. A formal research collaboration with the U. Colorado is operated through the Joint Institute for Laboratory Astrophysics.

Principal Services Provided to Industry and Commerce:

Calibration services including time and frequency measurements, uv source, detector, and spectrometer radiometry, surface layer thickness SRM; radio station broadcasts from Colorado and Hawaii that serve as the Nation's primary reference for time and frequency information; satellite broadcasts of a high accuracy time code that is used, for example, by the electric power industry; and evaluated data compilations, e.g. atomic and molecular energy levels, transition probabilities, wavelength standards, etc.

Principal Modes of Interaction:

Technical publications; conferences, workshops, committees; measurement and data services; collaborative research and industrial research associates.

Cooperative Research Projects with Industry:

Magnetic Microstructure Project - IBM, Kodak, Control Data Corp., Honeywell, General Motors, Perkin-Elmer, etc.

Time and Frequency Measurements - Precision Standard Time, Allan Osborne Associates, Heathkit, True Time, etc.

Thin Films and Surface Coating and Bonding Projects - companies representing chemical, electronic, and manufacturing technologies.

UV Radiation Source and Detector Development - electro-optics companies.

Notable Accomplishments of Importance to Industry or Commerce:

Invention of a "Magnetic Microscope", for measuring the magnetic microstructure of magnetic materials and information storage devices.

Invention of an Ultrashort-Pulse Multichannel Infrared Spectrometer, for measuring ultrafast processes in chemical (e.g. catalysis) and electronic (e.g. semiconductor) systems.

Invention of an Electric-Resonance Optothermal Spectrometer, for measuring high resolution microwave spectra and identifying complex molecular constituents contributing to chemical processes.

Development of Laser Wavemeters and Stabilization Techniques, for measuring laser characteristics and for electro-optic and photonic applications.

Center for Chemical Technology

Program Description:

Performs research required to provide the Nation with measurement standards, services, and key property data and predictive models for chemical processes of industrial and environmental importance. These property and engineering data will be used to improve and innovate design, increase efficiency, and reduce uncertainty in trade for the chemical, biochemical, natural gas, petroleum, and related energy industries, as well as the aerospace industries and academia.

Principal Services Provided to Industry and Commerce:

Standard reference data; computer codes for thermophysical properties; metering standards to assure equity in trade; measurement and calibration services.

Principal Modes of Interaction:

Trade Associations; participation in voluntary measurement; professional societies and standards organizations; cooperative research agreements

Cooperative Research Projects with Industry:

Orifice metering code revision - Gas Research Institute and American Petroleum Institute.
Mass Spectral Database - analytical instrumentation firms.
Supercritical fluid properties - industrial consortia.
Standards for industrial and medical gas trade - Compressed Gas Association.
Properties of industrial chemicals - Design Institute for Physical Properties Research and Gas Processors Association.

Notable Accomplishments of Importance to Industry or Commerce:

CCT databases account for the major computer code sales of the Office of Standard Reference Data and are used routinely by essentially every segment of the chemical, energy, and related industries.

CCT data on properties and flow parameters were used to reduce the uncertainty in natural gas sales in the U.S. by $140M per year.

The CCT protein crystal database is a key ingredient to realizing the full potential of the biotechnology revolution by speeding the commercialization of laboratory discoveries to marketable products.

Center for Radiation Research

Program Description:

Provides the Nation with ionizing radiation standards and measurement services for radiation applications; provides the Nation with radiometric standards and measurement services for ultraviolet, visible, and infrared radiation; coordinates and supports the National Measurement Support System for Ionizing Radiation that provides calibrations and measurement quality assurance services; and conducts research that can be applied to health, industrial radiation processing, lighting, radiation chemistry, advanced communications, and other fields to develop improved radiation measurement technology and essential data.

Principal Services Provided to Industry and Commerce:

Calibrations of radiation instruments, sources, and detectors; SRMs related to radiation dosimetry, radioactivity, and spectrophotometry; special tests, evaluations, and measurement quality assurance programs

Principal Modes of Interaction:

Measurement and measurement quality assurance services; participation in technical organizations and standards committees, e.g. the Council on Optical Radiation Measurements (CORM) and the American Society for Testing and Materials (ASTM); collaborative programs with industry; publications, talks, and participation in workshops and conferences.

Cooperative Research and Measurement Projects with Industry:

Research Associate programs - U.S. Council for Energy Awareness.
Cooperative research agreement to develop methods for determining picogram masses of fissionable isotopes - Westinghouse Research.

Notable Accomplishments of Importance to Industry or Commerce:

Development of an optical waveguide dosimeter for the radiation processing industries. This device, which received an R&D-100 Award, registers pulsed or steady fields of x and gamma rays, neutrons, and charged-particle beams.

Measurement methods and quality assurance for assessing neutron damage in reactor pressure vessels and related support structures. This work has the potential for a several $B/year impact on a $25B industry.

A national program, developed with the Health Physics Society, to accredit commercial laboratories that calibrate portable radiation survey instruments. The largest U.S. manufacturer of such instruments has been accredited.

Development of an absolute reflectance standard that is important to a large segment of U.S. industry involved in medicine, agriculture, food processing, printing, textiles, paper, plastics and building materials. This standard is estimated to have a $0.5B impact on a $50B segment of industry.

Advanced Systems Division

Program Description:

Develops Federal standards, conducts research, and provides advice and technical assistance in computer-related telecommunications including Integrated Services Digital Network (ISDN), parallel processing, system interfaces, distributed processing applications, and pattern recognition.

Principal Services Provided to Industry and Commerce:

Support to development of industry consensus standards; consultation with industry in development of conformance tests for standards.

Principal Modes of Interaction:

Participation in national and international voluntary standards development groups; sponsorship of conferences, workshops, and symposia for computer manufacturers, service providers, and industry computer users; cooperative research and testing of prototype standards.

Cooperative Research Projects with Industry:

Establishment of the North American ISDN Users' Forum.
Research in performance measurements for parallel processors.
Research in automated recognition.

Notable Accomplishments of Importance to Industry or Commerce:

The North American ISDN Users' Forum was established as a partnership between industry, user organizations, and government, with over 300 participating members. The ISDN conformance testing working group has produced about 1400 testing sequences to ensure the interoperability of multi-vendor ISDN's. Users have identified over 60 applications.

Calibrated magnetic tapes and speech/image recognition databases on CD-ROM are being developed and used worldwide for calibration and measurement. Over 300 research and development centers currently use these materials.

Computer Security Division

Program Description:

Develops standards and guidelines, performs research, and provides technical advice and assistance to government and industry for cost-effective security of computer systems and the information they process.

Principal Services Provided to Industry and Commerce:

Support to development of industry consensus standards; consultation with industry in development of conformance tests for standards.

Principal Modes of Interaction:

Participation in national and international voluntary standards development groups; sponsorship of conferences, workshops, and symposia for computer manufacturers, service providers, and industry computer users; cooperative research and testing of prototype standards.

Cooperative Research Projects with Industry:

Development of computer security standards and guidelines.
Research and testing of network security protocols.
Research in computer security technology.

Notable Accomplishments of Importance to Industry or Commerce:

The Data Encryption Standard (DES) developed by NCSL continues to be widely used by industry to encipher proprietary data, to protect personal identification numbers, and to encrypt passwords. The Clearing House for Interbank Payments System uses the algorithm specified in FIPS 113, Computer Data Authentication, to authenticate electronic funds transfer payments of a trillion and a half dollars each week.

The Open Systems Interconnection (OSI) Security Laboratory invites U.S. industry to participate in basic research in network security and the development of OSI security protocols. Major computer vendors have loaned equipment to the laboratory for their mutual benefit.

Information Systems Engineering Division

Program Description:

Develops Federal standards and guidelines, conducts research, and provides advisory services to Federal agencies in information systems technology, including data administration, data management, computer graphics, and software standards validation.

Principal Services Provided to Industry and Commerce:

Support to development of industry consensus standards; consultation with industry in development of conformance tests for standards.

Principal Modes of Interaction:

Participation in national and international voluntary standards development groups; sponsorship of conferences, workshops, and symposia for computer manufacturers, service providers, and industry computer users; cooperative research and testing of prototype standards.

Cooperative Research Projects with Industry:

Development of information systems technology standards.
Development of tests for software conformance to standards.
Consultation with industry on information technology needs.

Notable Accomplishments of Importance to Industry or Commerce:

Development of voluntary industry standards such as the Information Resource Dictionary System (IRDS), a software system that records, stores, and processes information about an organization's data and data processing resources. More than 110 copies of the data dictionary prototype have been distributed to industry.

Development of tests and test procedures for determining conformance of software to standards. More than 30 SQL test suites and 12 graphics test suites have been distributed to industry. An extensive compiler conformance testing program benefits industry with improved software quality and interoperability.

Systems and Network Architecture Division

Program Description:

Provides technical assistance to industry and government, performs basic research, and develops standards and guidelines in Open Systems Interconnection (OSI) technology, formal methods for test systems, and integrated, interoperable network management technology.

Principal Services Provided to Industry and Commerce:

Support to development of industry consensus standards; consultation with industry in development of conformance tests for standards.

Principal Modes of Interaction:

Participation in national and international voluntary standards development groups; sponsorship of conferences, workshops, and symposia for computer manufacturers, service providers, and industry computer users; cooperative research and testing of prototype standards.

Cooperative Research Projects with Industry:

Development of OSI standards and guidelines.
Establishment of research network to test OSI products.
Research in network management technology.

Notable Accomplishments of Importance to Industry or Commerce:

Establishment of the OSI Implementors Workshop. Meeting four times per year, this workshop brings together major computer and communications vendors to refine international standards into implementable specifications. Private industry utilizes workshop results in product development and the procurement of OSI products.

Initiation of OSINET, a research network for testing, demonstrating, and evaluating OSI products. OSINET currently has 25 participants from industry and government with nodes in seven states and five foreign countries. OSINET participates with similar networks throughout the world in OSIone, an international umbrella of OSI networks.

Systems and Software Technology Division

Program Description:

Conducts research, develops Federal standards and guidelines, and provides technical assistance to government and industry in software engineering and development, office systems applications, document interchange, electronic publishing, and operating systems.

Principal Services Provided to Industry and Commerce:

Support to development of industry consensus standards. Consultation with industry in development of conformance tests for standards.

Principal Modes of Interaction:

Participation in national and international voluntary standards development groups; sponsorship of conferences, workshops, and symposia for computer manufacturers, service providers, and industry computer users; cooperative research and testing of prototype standards.

Cooperative Research Projects with Industry:

Development of software engineering standards.
Research and testing of open system products and services.
Development of office systems engineering technology.

Notable Accomplishments of Importance to Industry or Commerce:

Development of automated methods for measuring conformance to the Portable Operating System Interface for Computer Environments (POSIX). Working with industry vendors and users, NCSL promotes the world-wide movement to open systems products and services which enhance portability and interoperability of software, people, and data.

Development of specifications suitable for use in acquiring engineering workstations, collaborating with the U.S. automotive industry to leverage the investment of U.S. vendors in open systems products across a world-wide marketplace.

Ceramics Division

Program Description:

Provides models, measurement methods, standard reference materials and standard reference data to enable industry to achieve key properties of ceramics through advanced processing. Assists industry in the development of technologies crucial to cost-effective manufacture of reliable ceramics.

Principal Services Provided to Industry and Commerce:

Standard reference data; measurement method development; standard reference materials; cooperative research; consultation; ceramic phase diagrams.

Principal Modes of Interaction:

Workshops; visits to/by industry; cooperative research; technical publications; attendance at technical meetings; participation in standards committees; industrial research associates; working groups.

Cooperative Research Projects with Industry:

Computerized Tribology Information System - consortium.
Computerized Structural Ceramics Data Base - Gas Research Institute.
Phase Diagrams for Ceramists - American Ceramic Society.
Synchrotron Radiation Analysis of Electronic Single Crystals - II-VI Corporation and Consortium on Crystal Growth.
Phase Equilibria of High Tc Superconducting Ceramics - AT&T.
High Temperature Lubricants - AKZO
Wear of Ceramics - Carborundum.
Round Robin on Ceramic Powder Characterizations - GTE, Carborundum, Norton, Ford, Garrett, AC Sparkplug, Elkem Metals
Effects of Lanthanide Substitutions on High Tc Superconductors - EPRI.

Notable Accomplishments of Importance to Industry or Commerce:

Completed volumes 1-8 of Phase Diagrams for Ceramists.

Discovered a heretofore-unobserved defect in GaAs single crystals.

Developed a less expensive tensile test for ceramics.

Established the current status of ceramic powder characterization.

Determined the Y-Ba-Cu-O superconductor phase diagram.

Fracture and Deformation Division

Program Description:

Conducts basic research on the deformation and fracture behavior of materials and applied research that is directed toward improving structural safety and industrial productivity. Studies in nonlinear fracture mechanics, acoustoelasticity, arc physics, composite mechanics, mechanical behavior, and physical-property measurements and modeling increase our understanding of materials behavior. Programs in fracture mechanics, nondestructive evaluation, and welding technology contribute to structural safety.

Principal Services Provided to Industry and Commerce:

Standard reference data; measurement and calibration services; measurement method development; cooperative research.

Principal Modes of Interaction:

Through cooperative research; standards committees; conferences; publications; and reciprocal visits with industry.

Cooperative Research Projects with Industry:

ONDE program on formability sensor for steel sheet.
Graphic simulation of wave propagation.
Fiber optic sensors for composites.
Thermomechanical processing of steels.

Notable Accomplishments of Importance to Industry or Commerce:

Graphic Simulation of Wave Propagation with Precision Visuals, Inc. and Hannaway Associates.

ONDE Program on Formability Sensor for Steel Sheet with Ford Motor. Co. A prototype sensor unit to be installed on a Ford stamping plant.

Fiber Optic Sensors for composites with Conoco. The Division is developing in-situ sensors to monitor the structural integrity of composite tethers for deepwater oil exploration for tension leg platforms. Conoco is providing subscale tendons with embedded fiber optic sensors.

Thermomechanical Processing of Microalloyed Bar Steels with Chrysler and Chaparral Steel. Division is developing basic metallurgical data to enable use of direct forging procedures without subsequent heat treatment.

Division has developed a new Charpy V-notch impact machine calibration standard. About 1000 industrial users are expected to make use of it next year.

A joint program with the Welding Research Council, standards bodies, and industry has provided a first series of standard welding procedures.

Metallurgy Division

Program Description:

Provide measurement science, materials characterization and data for use in the processing, selection and use of metals and metallic structures.

Principal Services Provided to Industry and Commerce:

Measurement methods and sensors development; cooperative research; standard reference and corrosion data; standard reference materials; technical consultation.

Principal Modes of Interaction:

Through six Research Associates, 25 Guest Workers, participation in committees that develop voluntary standards, consortia and other collaborative research projects with industry.

Cooperative Research Projects with Industry:

Corrosion Data Program - NACE and Materials Technology Institute.
Powder Metal Processing Consortium.
Sensors for Process Control - Aluminum Association and AISI.
Alloy Phase Diagrams - ASM International.
Coated Fibers - American Cyanamid.
Intelligent Processing of Materials - BDM Corp.
Layered Structures - IBM.

Notable Accomplishments of Importance to Industry or Commerce:

NIST has conducted a joint project with the National Association of Corrosion Engineers (NACE) to provide evaluated data in a computerized form on corrosion of metals.

Eddy current temperature sensors have been developed in collaboration with the Aluminum Association that can be used to significantly improve the quality and production rate of extruded aluminum products.

Ultrasonic sensors have been developed in collaboration with the AISI to measure the internal temperature and the position of the liquid-solid interface in steel production processes.

A collaborative program with three industrial partners has been established to study the atomization process for producing metal powders and precise measurement techniques have been developed to characterize the metal powder in-situ during the production process.

Polymers Division

Program Description:

Provide standards, measurement methods, and fundamental concepts of polymer science to assist U.S. industries that produce or use synthetic polymers in essential parts of their businesses. Technology transfer through consulting services and cooperative research is an integral part of program planning and execution.

Principal Services Provided to Industry and Commerce:

Standard reference materials; measurement facilities for proprietary data; cooperative research and development.

Principal Modes of Interaction:

Over 50 Research Associates and 80 Guest Scientists; 8 special facilities for collection of proprietary data; licensing of patents and collaborative development; workshops; planning visits; and standards committees.

Cooperative Research Projects with Industry:

Plasma Sterilization - Air Techniques
Composite Cure Sensors - National Center for Manufacturing Science.
Aging of Polymer Glasses - Armstrong.
Blend Morphology - Eastman Kodak.
Polymer Gel Structure - Polaroid.
Thick Section Composites and Radiation Curing of Macromonomers - duPont.
Polyolefin Blends - Exxon.
New Composite Resins - Hi-Tek.
Phase Changes in Thin Fibers - Ford.
Asphalt Binder Characterization - Highway Research Program.
Cure Kinetics Measurements - Ferro.
Elastomer Blends - GenCorp.
Improved Cure Systems - Texaco.
Carbon Fiber Surface Treatment - Hysol.
Trace Organometallic Analyses - Technical Assessment Systems.
Fiber Structure and SAXS - Hercules.
Polymers at Surfaces - IBM.
Dental Composite Restoratives - Densply International.
Piezoelectric Polymers - Westinghouse.
Nylon Blends - General Motors.
Polymer Dispersions - Rohm & Haas.
Dental Materials and Devices - American Dental Association.
Dielectric Charge Distribution - Union Carbide and EPRI.
Polymer Blend Processing - Mobil.

Notable Accomplishments of Importance to Industry or Commerce:

Hosted a workshop, jointly with the Suppliers of Advanced Composite Materials Association, to establish a plan to speed development of test methods for composites.

Reactor Radiation Division

Program Description:

Develop state-of-the-art cold and thermal neutron measurement methods and instrumentation and apply them to scientific and technological problems in materials science, physics, chemistry and biology; operate the Neutron Beam Split-Core Reactor (NBSR) as a national center for diverse private sector and government organizations who need neutron methods in their R&D activities; provide a national materials structure database.

Principal Services Provided to Industry and Commerce:

National Center for Neutron Research; national materials structure database; state-of-the-art neutron methods for materials research and analysis; workshops and symposia.

Principal Modes of Interaction:

Cooperative research; joint development of neutron measurement technologies; joint materials database activities.

Cooperative Research Projects with Industry:

Active projects with over 75 industries and universities - e.g., development of neutron reflectometry for surfaces and interfaces - IBM; characterization of high Tc superconductors - AT&T and Bellcore.

Notable Accomplishments of Importance to Industry or Commerce:

NIST has completed the construction of the Guide Hall Building and Laboratory Complex of the Cold Neutron Research Facility. This facility, when fully developed, will provide over 100 U.S. industries and universities with access to internationally competitive cold neutron measurement technologies which are critical for the development and understanding of all classes of new materials which underlie our industrial economy.

NIST has developed a greatly expanded materials structure database used by many U.S. industries and has, in collaboration with Sandia Labs, extended this database for on-line use with electron microscopes marketed by several U.S. companies.

NIST has developed the best U.S. neutron capability for studying surfaces and interfaces in a joint effort with IBM.

Office of Nondestructive Evaluation

Program Description:

The Office of Nondestructive Evaluation improves productivity and product quality in American industry by fostering the use of advanced nondestructive evaluation (NDE) methodology for materials process control and manufacturing, and for in-service inspection. The Office conducts research leading to the development and dissemination of: more sensitive and reliable NDE measurement methods; NDE measurement standards; and information to relate NDE measurement results to material and systems properties and performance.

Principal Services Provided to Industry and Commerce:

NDE methodology for materials process control and in-service inspection; NDE standards (documents, standard reference materials, calibrations); workshops.

Principal Modes of Interaction:

Cooperative research; standards writing committees; visits with industry; conferences and workshops.

Cooperative Research Projects with Industry:

Consortium for Intelligent Processing of Rapidly Solidified Metal Powders - General Electric, Crucible Materials, Hoeganaes.
Formability Sensor for Steel Sheet - Ford, steel companies, sensor company.

Notable Accomplishments of Importance to Industry or Commerce:

The NIST NDE program has efforts underway to advance the use of a number of NDE techniques. Three noteworthy accomplishments in eddy current conductivity techniques for materials process control and in-service inspection were used during the past year:

A joint effort between NIST and the Aluminum Association where an eddy current technique was developed for on-line monitoring of extrusion temperatures for a wide variety of shapes such as I-beams, sheets, and channels.

Development of a standard reference crack for the qualification of eddy current systems used in locating cracks in metal structures--such as aging aircraft.

Development of mathematical techniques for solving the inverse problem needed to utilize eddy current measurements for determining conductivity profiles in materials or at interfaces such as solid-liquid interfaces.

Office for Measurement Services

Program Description:

Provides metrology services to ensure that measurements made in the scientific, engineering, and industrial communities are consistent with national standards of measurement, or are based upon well characterized materials, evaluated data, or accredited test methods: develop, produce, and distribute Standard Reference Materials; provide standard reference data; provide calibration services, special tests, and measurement assurance programs; manage the National Voluntary Laboratory Accreditation Program (NVLAP) for assuring reliable laboratory testing of products and materials; collaborate with the Institute's laboratories and with outside organizations to assure the continued technical quality and responsiveness of measurement services provided to the public and private sectors.

Principal Services Provided to Industry and Commerce:

Standard Reference Materials
Standard Reference Data
Measurement Assurance Programs
Calibrations
Laboratory Accreditation

Principal Modes of Interaction:

Participation in national and international organizations, workshops, symposia, conferences.
Participation in industrial and professional standards associations.
Visits to and by industrial representatives.
Grants and contracts.

Cooperative Research Projects with Industry:

Properties of Industrial Chemicals - Design Institute for Physical Properties Research.
Certification of SRM's for calibration of environmental pollutants - Motor Vehicle Manufacturers Association.

Notable Accomplishments of Importance to Industry or Commerce:

A mass spectral database of over 44,000 spectra is incorporated in 10,000 industrial instruments and used in chemical analysis; for example, of pollutants in emissions.

NIST has developed and certified a series of low alloy steel Standard Reference Materials (SRMs) useful in controlling the production of quality steel and steel products.

Office for Standards Services

Program Description:

Provides technical assistance to public and private sector standardization and legal metrology activities and programs: formulate and implement policy regarding standardization and certification practices, and weights and measures practices; maintain liaison with private sector organizations, business and industry, State and local governments, and with other Federal laboratories to coordinate standardization and weights and measures programs and activities; recommend federal policies regarding the development, approval, and use of voluntary standards, and the development and implementation of standards coordinating mechanisms; monitor Federal participation in voluntary standards activities; operate the National Center for Standards and Certification Information; sponsor the National Conference on Weights and Measures; carry out U.S. obligations from membership in the International Organization of Legal Metrology (OIML).

Principal Services Provided to Industry and Commerce:

Inquiry and referral service associated with Foreign Standards and Codes Library Support of State Weights and Measures program.
National Type Approval Programs for Measuring Devices.

Principal Modes of Interaction:

Chairmanships and memberships on national and international standards organizations and committees.
Technical and policy advice.
Handbooks and training.

Cooperative Research Projects with Industry:

Incorporation of latest available electronic technology to assure uniform retail dispersing of motor fuels - National Conference of Weights and Measures and Oil Industry.

Notable Accomplishments of Importance to Industry or Commerce:

The National Center for Standards and Certification Information (NCSCI) serves as a referral service and focal point for U.S. industry to obtain information about standards and standards-related activities. Included is information on U.S., foreign, and international voluntary standards; mandatory government regulations; and rules of certification for non-agricultural products.

NIST is serving on interagency working groups to keep current on developments and to respond to the standardization efforts of EC 1992, the harmonization of the European Community into a single market. This is imperative so that U.S. industry is not precluded from entry into the European market by discriminatory standards.

PART IV.

INDUSTRIAL REPRESENTATION ON NIST EVALUATION PANELS

By NIST MOU and Center

INDUSTRY REPRESENTATIVES ON NIST EVALUATION PANELS

NATIONAL ENGINEERING LABORATORY

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Executive Director, Research
Communications Sciences Divison
AT&T Bell Laboratories

Center for Building Technology

Mr. Don Backenstow, Director
International Operations
Carlisle SynTec Systems

Dr. Harold Forsen
Vice President, R&D
Bechtel Group, Inc.

Mr. Francis Govan, P.E.
ZBA Engineers, Inc.

Dr. Pieter von Herrmann, President
Lighting Research Institute

Dr. Jan Skalny, Director
Construction Matls. Reseach
W.R. Grace and Company

Mr. Loring Wyllie
Chairman of the Board
Degenkolb Assoc., Engineers

Center for Computing and Applied Mathematics

**Dr. Alfred E. Brenner
Director, Applications
Supercomputing Research Center

Dr. James George
Mesa Graphics

Dr. Anthony C. Hearn
The RAND Corporation

Dr. Joanne L. Martin
T.J. Watson Research Center
IBM

Dr. Gary C. McDonald, Head
Mathematics Dept.
GM Research Labs.

Dr. Kenneth W. Neves, Manager
Scientific Computer Analysis Div.
Boeing Computer Services, Seattle

Dr. Melvin R. Scott, Manager
Alabama Supercomputer Center
Boeing Computer Services, Hunstville

Center for Electronics and Electrical Engineering

Dr. Robert A. Bell, Vice Pres.
Consolidated Edison Company of NY

Dr. Alan J. Cookson, Mgr. S.D.
Westinghouse R&D Center

Dr. William E. Cory, Vice Pres., retired
Southwest Research Institute
AT&T Bell Laboratories

Mr. Daniel F. DiFonzo
VP & General Manager, retired
COMSAT (Retired)

Dr. William J. Gallagher
Manager, ECRG
T.J. Watson Research Center
IBM

Mr. Harlan Howe, Jr.
Director, Advanced Development
Adams-Russell Electronics

Dr. Felix P. Kapron
District Manager, Opt. Stds.
Bell Communications Research

Mr. John J. Lee, President
Telogy, Inc.

Dr. Byron D. Martin, Mgr.
Semiconductor PMC & New Products
IBM General Technology Division

Mr. John R. Page, Jr., R&D Manager
Hewlett-Packard Company

Dr. Loren C. Skinner, II, Dir. Res.
National Semiconductor Corporation

Mr. Larry W. Sumney, President
Semiconductor Research Corporation

Mr. T. Peter Sylvan, Principal Staff
Engineer Teradyne, Inc.

Center for Fire Research

Mr. James Beyreis
VP & Chief Engineering
Fire Protection
Underwriters Laboratories

Mr. Larry Donner
Iowa City Fire Chief

Dr. Raymond Friedman
Scientific Advisor
Factory Mutual Research Corp.

Ms. Carol Gross
Phoenix Fire Department

Mr. David McCormack
International Assoc. of Fire Fighters

**Dr. Michael O'Mara, Manager Cml.
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Mr. James McMullen
California State Fire Marshal

Mr. Anthony R. O'Neill, Vice President
National Fire Protection Association

Mr. James Quiter, Vice Pres. & Engr.
Mgr.
Rolf Jensen Associates

Center for Manufacturing Engineering

Dr. John H. Bruning
GCA Corporation

Mr. G. Kenneth Dawson
Factory Engineering Manager
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**Dr. Philip H. Francis
Vice Pres., Corp. Tech. Center
Square D Company

Mr. James F. Lardner
Vice Pres., Tractor & Component Opns.
Deere & Company

Dr. Roger N. Nagel
Intelligent Systems Lab.

Mr. Brad Rigdon
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NATIONAL MEASUREMENT LABORATORY

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Keithley Instruments

Dr. J. Peter Jesson
Lab. Dir., Cml & Pigments Div.
E.I. duPont de Nemours & Co., Inc.

Center for Analytical Chemistry

Dr. Robert Denyszyn
Technical Director
Scott Specialty Gases

Dr. Robert E. Finnigan
Finnigan Corporation

Dr. H. Creswell Fleming III
President, Analyt. Chem. Dept.
Shell Development Company

Dr. Harold A. Kaufman
Vice Pres., Research & Development
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Dr. Walter Slavin
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IBM Almaden Research Center

Dr. Richard Freeman
AT&T Bell Laboratories

Dr. Robert White
Vice Pres. & Chief Technical Officer
Control Data Corporation

Center for Chemical Technology

Dr. Ralph Christoffersen
Vice Pres., Discovery Research
The Upjohn Company

Dr. William Drohan
Plasma Derivatives Lab.
American Red Cross

Dr. James Fulton
Engineering Fellow
Monsanto Agricultural Co.

Dr. Charles Kolb
President
Aerodyne Research Inc.

**Dr. Douglas E. Leng
Lab. Director, Central Research
Dow Chemical Company

Dr. Peter Makarewicz
Head, Cml. Eng. Research Lab.
Eastman Kodak Company

Dr. Thomas Sciance, Principal Conslt.
R&D Planning Division
E.I. du Pont de Nemours & Co.

Dr. Constantine Tsonopoulos
Sr. Engineering Associate
Exxon Research and Engineering Company

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Dr. William C. Eckelman
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Dr. Klaus B. Jaeger
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Phillip Wychorski
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INSTITUTE FOR MATERIALS SCIENCE AND ENGINEERING

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Dr. Cecil M. Teller, President
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Dr. Maxine Savitz, Director
Ceramic Components Division
Garrett Processing Company

Fracture and Deformation Division

Dr. Neil Paton
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Rockwell International

Metallurgy Division

Dr. Ian Hughes, Vice President
Inland Steel Company

Dr. A. R. C. Westwood
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Research and Development
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Dr. John McTague
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IBM Fellow
IBM Corporation

Advanced Systems Division
Computer Security Division
Information Systems Engineering Division
Systems and Network Architecture Division
Systems and Software Technology Division

Dr. Ugo O. Gagliardi
President, General Systems Group

Mr. Philip J. Kiviat, Vice President
Chartway Technologies

Dr. Robert E. Kahn, President
Natl. Res. Initiatives

Dr. Henry McDonald, Head
Govt. Sys. Research, AT&T

TECHNOLOGY SERVICES

Standard Reference Data

Dr. David W. H. Roth, Jr.
Vice President, Ofc. of
Science & Technology
Allied-Signal, Inc.

**Mr. E. L. Daman
Chairman Emeritus
Foster Wheeler Dev. Corp.

Herbert B. Landau
President
Research Publications, Inc.

Mr. John J. Moran
Chairman
Materials Properties Council

Dr. James J. Wynne
T. J. Watson Res. Center
IBM

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* indicates MOU Panel Chairman

** indicates Center Panel Chairman, who also serves as an ex-officio member of the MOU Panel

PART V.

NIST R&D 100 AWARDS

Short Descriptions of NIST Awards

The R&D100 Award (formerly known as the I-R 100 Award) honors the 100 most significant new technical products each year. The international award program recognizes innovators and organizations for outstanding technical developments, and identifies significant technological advances. The 100 annual winners are selected on the basis of importance, uniqueness, and usefulness from a technical standpoint, in a competition sponsored by *Research and Development* magazine.

Since entering the competition for the first time in 1973, the National Institute of Standards and Technology has won the award 64 times, ranking NIST fourth on the all-time winners' list among private and public sector laboratories. The Institute's winning entries are described below. After the title of each award winner, a brief description and the application are given.

1989

Digitally-Synthesized Voltage Source

Portable, digitally-synthesized ac voltage source refers ac voltage to dc voltage standards; used for evaluation of thermal voltage converter-based measurement systems and for on-line ac voltage calibration of automatic test equipment.

Application: Calibration of high-accuracy digital voltmeters.

Chelation Ion Chromatography

Separates transition metals, e.g., nickel or copper, from specimens such as human and plant tissue, body fluids, and environmental samples. Analysis at part per billion level; 10 to 100 times faster than conventional open-column methods.

Application: New levels of efficiency, accuracy, precision for trace metal analysis.

1988

Absolute Determination of Aqueous Electrolytic Conductivity

Technique uses a variable cell size that is accurate to 0.02 percent, and does not have to be calibrated because its results are traceable to the physical standards of mass, length, and electrical resistance.

Application: Absolute electrical conductivity determinations of aqueous solutions for standards.

Trace Measurement System

A single circuit board added to the computer system can measure key characteristics of a program, such as the time it takes to execute a piece of code and how frequently a piece of code is executed.

Application: Performance measurements of multiprocessors.

Optical Waveguide Dosimeter

Dyes are used in the core of a long fiber-optic tube. A light source at one end and a detector at the other read changes in the dye. These dosimeters can function over a range from about 0.005 to 10,000 gray.

Application: Dose and dose rate measurements of x-rays, gamma rays, neutrons, charged particles.

Cone Calorimeter

Instrument measures the heat released and the rate at which it is released, the time it takes for a material to ignite, the amount of smoke produced, and the amounts of several known toxic gases.

Application: Data for predicting fire hazard from a small sample of product.

Image-Preserving Optical Delay

System stores optical images of a random event long enough so the shutter of a high-speed camera can be opened and photographs taken of the processes leading to the random event.

Application: Photographic record of events which occur before the shutter is open.

1987

In-Situ Ceramic Quality Sensor

Piezoelectric transducers generate ultrasonic wave pulses that travel through a mold and into a sample. Ultrasonic echoes are recorded as they reflect back and forth. Sensor is sensitive to porosity, moisture, and chemical content.

Application: Automated inspection of ceramic powders during compaction.

Ultrasound Pipe Porosity Sensor

A powder flux that eliminates the use of high pressure rollers is used as a liquid coupling between the hot steel and a buffer rod. A piezoelectric transducer monitors high-frequency sound waves that are coupled into and out of hot steel samples.

Application: Rapid detection of flaws in hot steel for cropping unsound material.

Laser Scanner for Crystal-Axis Orientation

A significant modification of the laser scattering approach and a computerized pattern recognition algorithm are used to determine the orientation of the crystal axis in single crystal semiconductor materials in less than a second.

Application: Manufacture of semiconductor devices.

Microwave Dissolution System

Microwave energy is combined with high pressure generated from closed vessels to decompose samples in less than 15 minutes. Traditional methods routinely took 4 hours to 4 days.

Application: Rapid dissolution of chemical samples in closed vessel by microwaves.

Infrared Emission Surface Profilometer

Material is heated slightly and the resulting emissions are detected by infrared thermography. A microcomputer-based image processor is used to convert the thermographic image to a topographic map of the surface.

Application: On-line inspection to measure roughness of surfaces and find defects.

Digital Compositional Mapping

Digital computer technology coupled with electron beam instruments provide information on the type and number of atoms at sample sites 1 micrometer or finer in dimension. A color-enhanced video image of the sample is produced.

Application: Characterization of microstructures in various materials.

1986

Pipelined Image Processing Engine

Computer performs hundreds of millions of calculations per second to manipulate raw visual images and generate information for a vision system computer to recognize specific features such as texture, shade, edges, or motion at every point in a 256 x 256 frame.

Application: High speed processing of video images in real time.

10-Micrometer Polystyrene Spheres, SRM 1960

Billions of tiny spheres were produced aboard the space shuttle Challenger using a specially-developed chemical process that depends on low-gravity environment to produce polystyrene spheres that are uniform in size and shape.

Application: Assurance of the quality of measurements and scientific instrument performance.

Josephson Series Array Voltage Standard

Researchers developed an integrated chip that incorporates 2,076 Josephson junctions and can produce any voltage between 0.1 and 1.3 Volts at accuracies 10 to 100 times better than available systems.

Application: A useful voltage standard comparable to the U.S. standard.

High Efficiency, Soft X-Ray Spectrometer

Specially designed instrument measures very-low-intensity radiation with efficiencies 1000 to 10,000 times higher than conventional spectrometers. Measurements can be made in less time or with weaker sources having radiation in the range of 20ev to 1kev

Application: Studies of spectra of light elements in fragile materials.

Nonaqueous Reference Electrode

Vinylferrocene is electrochemically polymerized onto a platinum disk electrode and thermally crosslinked with a benzoyl peroxide initiator. Duration of useful stability ranged from a few hours in dimethylformamide to several days in acetonitrile.

Application: Measurement of voltages in nonaqueous electrochemical systems.

Precision Step Generator

Device generates precise, fully programmable voltage steps that exhibit fast transitions and exceptionally smooth settling to final voltage value.

Application: Measurement of rapid voltage pulses for engine performance or lightning vulnerability.

1985

Transport Protocol Test System

The system is a set of complex software programs including a reference implementation, tests, a test interpreter, and an exception or error generator.

Application: Self-tests of computer systems for conformance to networking standards.

Computer-Controlled Principal Angle Ellipsometer

Device operates automatically at the principal angle to determine thickness and refraction index of thin films extremely accurately. It can be used to measure thin film growth, monolayer surface contamination, surface damage, or surface crystallography.

Application: Measurement of thin films to evaluate and control thin film deposition.

Error Compensation System for Computerized Numerically Controlled Machine Tools

System determines and compensates for thermal and geometric errors that include all degrees of freedom. System is applicable to all manufacturing processes requiring chip-forming operations.

Application: Improved accuracy of computerized numerical control machine tools.

Visible-Light ~~Detector~~

High accuracy absolute radiometric standard with 100% quantum efficiency, within +/- 0.1%, is based on physics of silicon photodiode.

Application: Absolute standard for radiant power & photodetector sensitivity measurements.

Parametric Amplifier Electrometer

Designed for use with NBS-designed thermal ionization mass spectrometers, this instrument can be used with similar types of measurement systems. Switch-selectable response times allow it to measure signals close to the theoretical noise level.

Application: Measurement of extremely low levels of current.

High-Current Monochromatic Electron Gun

Electron gun makes use of a "negative electron affinity" (nea) photocathode similar to those used in night-vision devices to produce a high-current electron beam with currents in excess of 1 microamp with an energy spread of 31 mev.

Application: Component for surface science, electron spectroscopy, and electron lithography.

Type 3 Capacitance Bridge

First fully automatic capacitance bridge capable of the precision and accuracy required by standards laboratories can select from and calibrate up to 16 external capacitors with an accuracy of 1 part per million from 400 to 3000hz.

Application: Calibration of electrical capacitance standards.

50 khz Phase Angle Standard

Device is used to test and calibrate phase meters, phase angle voltmeters, signal analyzers and power factor meters. Also used as a phase-adjustable, dual-signal source for power and energy measurements, transformer loss measurements, and ratio measurements.

Application: Metrology support for fundamental electrical measurements.

Thermal Ionization Process for Measurement of Sulfur

High accuracy, low level method is used to measure sulfur in steel. Process is used for certification of sulfur in a variety of Standard Reference Materials including metals and environmental and biological references.

Application: Measurement of sulfur in steel.

1984

Flow-Injection Electrochemistry System.

A tiny electrode of gold or platinum in a miniature electrochemical cell is vibrated at a controlled frequency by a loudspeaker. Current is monitored, and any change recorded when a sample is introduced is proportional to concentration.

Application: Chemical analysis of small liquid samples.

Vacuum Ultraviolet Absorption Spectrometer

Instrument uses the VUV light from plasma produced when a pulse from a high-power ruby laser strikes the surface of a solid target. 1.5 meter grazing-incidence instrument combined with a channel electron multiplier array directs light into diode array.

Application: A versatile table-top vacuum ultraviolet absorption spectrometer.

Transaction Analyzer

The TA can be programmed with an idealized model of an operating communications channel. The channel is then monitored and any anomaly is recorded. The TA can also be programmed to take action whenever a particular pattern occurs.

Application: Detection and interception of subtle flaws in complex computer systems.

1983

Gas-Phase Desulfurization Process

Ozone, an olefin and water vapor are added to the gas stream. The olefin and ozone react to form an intermediate that reacts with sulfur dioxide and water vapor to produce sulfuric acid and some ketone. Secondary reactions remove the nitrogen oxides.

Application: Removal of pollutants from exhaust gas of fossil-fuel power plants.

Automatic Resistance Thermometer Bridge/Microhm Meter

New resistance bridge is controlled by a microprocessor which generates square waves, balances bridge current, selects the measurement current and frequency, and controls the multiplexor port.

Application: Monitoring and control of precision resistors.

Microsecond-Resolution Radiation Thermometer

Radiation from a test specimen heated to its melting point is optically divided by a beam splitter into two components, which go through two filters at different wavelengths. Signals are recorded digitally vs. time and converted to true temperature.

Application: Performance characterization of strategic materials for uses in weapons, spacecraft.

High-Temperature Optical Fiber Thermometer

A sapphire optical fiber rod whose tip is coated with iridium or platinum and aluminum oxide to create a blackbody cavity is placed in a high temperature stream. Intense light is transmitted to a detector for temperature measurement.

Application: Measurement of temperatures up to 2000°C.

1982

Resonance Neutron Radiographic Imaging System

A nuclear scintillator produces photons from incoming neutrons, a microchannel plate device and a resistive anode detector, which gives the position of incident electrons in two directions. Every isotope has its own unique neutron signature.

Application: Identification of different elements and isotopes of same elements.

Drill-Up

Drill-Up monitors the vibrations in a workpiece while it is being drilled. It compares the vibration signature over a period of time, detects periodic disturbances that are characteristic of drills that are about to break, and signals for a change of drill.

Application: Prediction of drill failure, enabling drill replacement prior to breakage.

1981

Ultrasonic Interferometer Manometer

Device has ultra-high accuracy and fast response time for measurement of pressure.

Application: Pressure calibration and measurement for control of aircraft.

Laser Wavelength Reference

Thermionic diode is placed in an alkali vapor. The vapor becomes excited by the process of one- or two-photon absorption. The wavelength is indicated by the resulting diode current increase. Different alkalis produce or measure different wavelengths.

Application: Performance comparisons between wavelength-measuring spectrometers.

Improved Acoustic Emission Transducer

Transducer compares previously recorded acoustical signature of a defect-free manufactured specimen with the signature of a suspect specimen. Can be used to perform a comparison calibration on a transducer of unknown quality to make a secondary standard.

Application: Secondary standard for transferring calibration and for flaw location.

Portable Iodine-Stabilized Laser

The laser function is separated from the wavelength reference function by using a separate absorption cell in the optical cavity. Iodine gas is used as the wavelength reference and results in an accuracy improvement and stability increase.

Application: Critical measurements in automated production and inspection facility.

1980

Vacuum Ultraviolet Window

Multicapillary array structure is used to transmit radiation in the vacuum UV and soft x-ray range but acts as an effective barrier to inhibit gas flow.

Application: Component in absorption cells, furnaces, beam splitters, and laser windows.

Surface Magnetometer

A low energy electron gun polarizes the spin of the electrons in the beam of the magnetometer. Spin polarization is modulated and the strength of the modulated signal is proportional to the surface magnetization of the target.

Application: Magnetization measurements of the outer layers of atoms on a crystal.

Large-Scale Coordinate Measuring Machine

Three theodolites set up at the points of an equilateral triangle are tied to a computer which automatically records the angular measurements of each theodolite and compares it to the other two. Computer determines three dimensional coordinates of object

Application: Measurement of the size and shape of large objects such as tanks, wings, hulls, etc.

Acoustic Emission Sampler

Pencil is held at a constant angle and lead is broken by means of a forcing screw. A built-in load cell measures the amplitude of the pulse, which can be changed by changing the size and type of the lead. Peak-holding force indicated in newtons.

Application: Performance and level setting checks of acoustic emission instruments.

Transpiration Mass Spectrometer

Small sample is heated in a closed container to a specified temperature. A carrier gas is used to remove vapor of interest under carefully controlled flow conditions in order to keep the temperature and pressure constant and avoid condensation.

Application: Sampling of condensed species of metals or nonmetals.

Wide Band RF Voltage Comparator

Closely matched pair of Schottky-barrier detecting diodes compares the unknown RF voltage to some reference source of ac voltage. Detected voltages are arithmetically summed to give a dc voltage proportional to the difference between the two.

Application: Calibration of RF products, highly precise voltage measurements.

1979

Nd-Doped Fluorophosphate Glass for High-Energy Lasers

Nd-doped fluorophosphate glass with the required properties represents a 50 percent improvement over conventional laser glasses; for lasers used in some experimental fusion systems (including temperatures on the order of 100,000,000°C).

Application: Optical components of high-energy lasers.

X-Ray Magnifier

Real-time x-ray images are produced at a 25-fold improvement in resolution over conventional real-time radiographic systems.

Application: Improved inspection of flaws in industrial products.

Deep-Sea Sampler

PTFE-lined sampler runs on simple spring-activated mechanism, and is relatively inexpensive, small, corrosion resistant, and safe to operate, even from vessels with comparatively primitive support equipment.

Application: Sea water sampling at prevailing temperature and pressure at depth of sampling.

1978

Digital Sine-Cosine Stepping Motor Driver

Small computer replaces pulse signals with digitally generated sine and cosine waves. Improves the precision with which motor can be positioned by a factor of over 30; significantly reduces inherent vibration in motor.

Application: Control system for stepping motors used in scientific equipment.

Gallium Temperature Reference Standard, SRM 1968

Cell consists of sealed PTFE and nylon cylinder containing sample of extremely pure gallium. Temperature reference is the melting point of gallium, 29.77°C , where hospitals & clinics make temperature sensitive measurements.

Application: Extremely precise reference standard for use in hospitals & clinics.

Piezo-Flex Micropositioning Stage

Stage combines stacks of piezoelectric transducers with novel application of the principles of simple mechanics. Transducers can be activated by remote control and stage can be isolated from vibration, etc.

Application: Measurement of very small dimensions with optical & electron microscopes.

1977

Micrometer Scale for Calibrating Scanning Electron Microscope

Layer of bright nickel is electroplated onto surface of thin Monel sheet; alternate layers of bright gold 40 to 80 nanometers thick and bright nickel 1, 3, and 5 micrometers thick. Distances between gold lines used to calibrate SEM magnification scale.

Application: Magnification calibration in 2,000 to 40,000 magnification range.

Laser Wavelength Meter

System of corner-cube retroreflectors provides automatic alignment of laser beams; lambda meter compares wavelength of unknown beam with known standard frequency laser; gives wavelength readings for CW lasers in visible, infrared, and ultraviolet regions.

Application: Digital readout of wavelength for CW lasers.

Satellite Controlled Clock

Digital clock system automatically resets and corrects itself on the basis of a radio time code broadcast from one of two orbiting satellites.

Application: Time determination to within 20 microseconds of world time standard.

1976

Rubidium Portable Clock

Long battery operation, light weight, small volume, and precision to 0.1 microsecond permit easier handling without sacrificing accuracy and precision during worldwide clock comparison trips.

Application: Worldwide time comparisons.

Laser Flying-Spot Scanner

High-frequency and dc gains in transistors can be mapped to reveal areas of device working in nonlinear manner, electronically map temperature in transistor, and detect location of hot spots. Can help establish product reliability and be used as a tool for failure analysis.

Application: Design of semiconductor devices and circuits

Cerebellar Model Arithmetic Computer

Device differs from conventional computers in physical structure, method of computation, and program representation; exhibits most elements of learning, generalizing, associative recall and context-sensitive decision making seen in human conditioned reflexes.

Application: Servo controller for robot manipulator.

Dual Mixer Time Difference Measurement System

A digital readout of time difference is provided with precision of 0.1 picosecond, 500 to 1000 times better than previously available devices, at about the same cost.

Application: Determination of variations in time difference between clocks or frequency standards.

1975

Dew-Frost Apparatus

Two temperature-controlled metal blocks are brought in contact with the front of sealed insulating glass unit and temperature is slowly lowered until dew/frost deposits appear on the inner glass surface while temperature is carefully monitored.

Application: Longevity performance of sealed insulating glass units.

Laser Intensity Stabilizer

Extraordinarily fast electronic servo system senses the fluctuations in the laser's intensity and rapidly changes the transmission coefficient of an active element to compensate. Can be used with any CW laser up to power levels of 2 or 3 watts.

Application: Continuous control and stabilization of the intensity of a laser beam.

Electrically Calibrated Pyroelectric Radiometer

Radiometer compares the heat from absorbed light with the heat generated by a measured electric current flowing in the light absorber.

Application: Measurement of power of light beams from ultraviolet to far infrared.

1973

Electric Density Meter

Meter provides easy, accurate readings of complex electromagnetic fields; can be used to test effects of radio waves on living organisms, find energy leaks in microwave systems, and test radar equipment for hazardous radiation.

Application: Measurement of electromagnetic field intensity.

NIST RELATIONSHIP WITH DARPA

Mr. **Rogers**. How does what you do relate to DARPA? Do you do the same thing as DARPA?

Dr. **Lyons**. We often work on similar subjects, but I think we work differently for a number of reasons.

First of all, DARPA has a large budget. They have their own defined needs. The services identify their needs or deficiencies and then ask DARPA to invest some of their funds in these areas.

So, DARPA can in fact issue contracts to buy prototype products. What they really are doing then is pulling a product through their whole R&D system. They end up with something on the desk which is the result of the entire commercialization process. They are doing that with flat panel displays, for example. That is an expensive proposition.

In our case, because we don't know the customers specifically, we only have an idea of what the needs are. Industry knows the customers. We are one stage removed from the customers and the marketplace. We can't define the particular product. We can say that the new high-temperature superconductors are important as a class, and we ought to be addressing certain generic problems industry is having.

For example, with the high-temperature superconductors, industry is having a hard time getting high currents through them in the presence of magnetic fields. That is crucial. For many applications like the magnetic levitation trains, you have to be able to get very high currents through or you don't get the advantage of superconductivity. There is a host of measurement problems in understanding the kind of research necessary to do that.

What we try to do is stay away from the proprietary aspects of the project and stay in the precompetitive, open generically shared area. You will find that DARPA is working on high-temperature superconductors and so are we, but they are trying to pull products through and we are trying to catalyze industry's efforts. They are closer to the end product than we are.

NIST RELATIONSHIP WITH U.S. INDUSTRY

Mr. **Rogers**. Then as I understand it DARPA is essentially working on issues similar to yours, the difference being that, as you say, DARPA has a fairly defined constituency out there, the four military branches.

Is it possible for you to develop the same kind of research on a different constituency, that being the American economic system? Could you not do more toward surveying the needs, the everyday practical needs of that constituency and then tailoring what you do to those needs, not in a passive way, but in a much more aggressive way, seeking out what is needed for us to be able to market X, Y, or Z widgets? Is that possible, or do you do that now?

Dr. **Lyons**. Yes and no. We do it—the programs that are before you, all of the needs in these programs were derived by lengthy ongoing conversations with our industrial clients. When we say that the needs in the semiconductor area are A, B, C, and D, that is because that is what industry is telling us over and over and over again. We don't dream up these needs ourselves.

We have that relationship with our current set of clients. I think it is necessary to improve that all the time. We are always trying to get better information. If we look at the new authority, particularly the Advanced Technology Program, which some people have called a mini-DARPA, we start there with the presumption that we don't know what the needs are.

Congress suggested in the legislation by way of example a few advanced technologies. Our first step is to begin to hold public workshops and go to industry to say, what do you think this program should have as its priority technologies, or do you think we should specify what the technologies are? If not the latter, to put out an RFP and see what the quality of the proposals are. No matter how you do that, we have to be guided by industry.

In fact, the Secretary says we should be led by industry. He coined this phrase last spring, industry-led programs, which is our attempt to say that industry knows its business. What we are trying to do is help industry.

Mr. ROGERS. Well, it seems to me that your mission has to change as times change. The change has occurred in the last few years on the world stage. No longer is innovation and product development and product quality and the selling of products an American game, solely an American game as it was just a few years ago when we occupied the world stage alone.

Now our competition is not across the street. It is across the ocean. It seems to me that your mission has to sort of shift with the sands. For that reason, it seems to me we should be doing more toward pushing American industry rather than reacting to it. Pushing it and shoving it along the way, encouraging all the while with the technical capabilities that only you possess really, as far as the government is concerned.

You know, the old name of your agency had to do a lot with standards and classifications of material. Now your stated mission also includes the words "Technology and promotion of technological innovation." I hope we emphasize that latter part in recognition of the worldwide competition that we are losing at the moment.

Mr. Chairman, I yield back.

STATE TECHNOLOGY EXTENSION PROGRAM

Mr. SMITH. I notice that you are proposing to terminate the State Technology Extension Program. That was $1.3 million. What is behind that decision?

Dr. LYONS. The $1.3 million that was put in by Congress was a transfer from Small Business Administration accounts last year, and was not an Administration request. There is already a difficulty there.

Secondly, we believe that we want to focus, if we can, our attention on the Advanced Technology Program and the other programs that I mentioned.

Mr. SMITH. Is there difficulty with that program or you just thought it was a lower priority?

Dr. LYONS. It is a brand new program. It is an effort that was part of the Omnibus Trade Act of 1988. We are going to use this

$1.3 million, which we regard as a one-time appropriation, to carry out the law, which says we should fund some demonstration projects on how to do additional kinds of technology transfer. Then we think that the program should fall back together with some of these other efforts.

Mr. Boehlert made it clear at the authorization hearing he was not pleased with that. He requested the Deputy Secretary to take a second look at it.

Mr. SMITH. If you have any different recommendation, will you have that also by Easter?

Mr. MERCER. Yes.

Mr. SMITH. We have several other questions, including some that are fairly technical in nature, that I think would just as well be answered for the record.

NIST has had a long and hard pull, it seems like, even though it has only been a few years. I believe we are going down the road together now. I hope so, because it is not just us who are involved. It is the whole country.

Mr. SMITH. Thank you for your testimony today.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

Fiscal Year 1991 Budget Request

Request to OMB

QUESTION:

What was your budget request to OMB, and what changes did OMB make in that request?

ANSWER:

The budget request of OMB totaled $210.5 million. The OMB mark of $198.4 million reflected the following changes to the request:

Item	Change ($M)
Chemical Measurements and Standards	-$.6
Intelligent Processing of Materials	-1.3
Lightwave Measurement Technology	-2.0
Advanced Semiconductors	-1.3
High Temperature Superconductors	-.6
Intelligent Machines	+2.0
ISDN	-1.0
Computer Security	-1.0
U.S. Response to EC 1992	-.5
Advanced Technology Program	+1.6
Scientific Computer Upgrade	-2.5
Facilities Retrofit	-2.0
Adjustments to Base	-1.1
Sequester	-1.8
Total Change	-12.1

Impact of Sequestration

QUESTION:

How much was sequestered from the FY 1990 appropriation for NIST, and what was the impact of that reduction on your various programs?

ANSWER:

The FY 1990 sequester of $1,764,000 was distributed pro rata across all NIST programs. As a result, NIST managers will cut back on other objects expenses, such as for supplies and other services. Additionally, NIST managers will need to delay the filling of non-critical personnel vacancies.

Regional Center for the Transferring of Manufacturing Technology

QUESTION:

What is the program's potential impact in transferring automated manufacturing technology to small and medium-sized firms based on your experience with the first three centers?

ANSWER:

The NIST Manufacturing Technology Centers Program established its first three Centers in January 1989 and is still in the early stages of implementation. Collectively, the Centers to date have contacted more than 1500 small- and medium-sized companies, visited greater than 300 of these companies, and initiated more that 200 technology transfer projects. Technology transfer projects have ranged from locating suppliers, saving hundreds of dollars, up to development of a CAD/CAM upgrade project for a company in Cleveland, estimated to save the company $4 million. Additionally, the Centers have established formal linkages with approximately 28 technical and community colleges which principally serve as training institutions for small- and medium-sized manufacturing businesses. Although it is early in the program, these first centers have made solid progress.

QUESTION:

Are the centers being financed in part with non-federal matching funds, and is the commitment from the states and the private sector likely to continue when federal funding is terminated?

ANSWER:

Yes. At least 50% of the Center's capital and annual operating and maintenance budget is provided by non-federal organizations. Additionally, in years 4, 5, and 6, NIST may not provide more than 40, 30, & 20 percent, respectively, of the Center's budget. Allowable matching funds include dollar contributions, revenue from licensing and royalties, fees for services performed, and in-kind contribution of personnel, equipment, and rental value of donated facilities/space. During its third year of operation, an independent Merit Review Panel appointed by the Secretary will evaluate the Center against program objectives as well as evaluate its funds-matching performance. The Panel will consider the Center's potential for continued operation after federal funding terminates and include this assessment as part of their recommendation to the Secretary as to whether or not to continue federal funding in years 4, 5, and 6.

QUESTION:

What do you believe should be the future of the program?

ANSWER:

It is too early to tell whether the program should be continued far into the future. At this point the existing three centers have made progress and we are committed to start one to two more centers.

Advanced Technology Program

QUESTION:

You are proposing to continue the Advanced Technology Program at $10 million. Last year, the Administration opposed this program. Why have you changed your mind?

ANSWER:

The Administration is in support of the ATP program so long as it provides the minority share to industry-led consortia doing research that is generic and pre-competitive.

QUESTION:

What do you hope to accomplish in this program during FY 1990, and how much of the $10 million do you expect to obligate this fiscal year?

ANSWER:

We expect to establish the procedures and mechanisms in the first year that will remain in effect for the life of the program. As required by the statute and the legislative history, the selection criteria must be published in the Federal Register, first for comment, and then in final form, prior to accepting any proposals under ATP. We will then publish an announcement and conduct a competitive selection process. We expect to obligate the entire $10 million in FY 1990.

QUESTION:

What do you hope to accomplish with this program during FY 1991?

ANSWER:

In the second year of the program we plan to establish a routine mechanism for active industry participation in the entire ATP program from priority setting to overall strategy.

Increases for Core Programs

QUESTION:

Of the approximately $33 million in program increases for core NIST research programs, which of these items were requested in the FY 1990 budget?

ANSWER:

The following FY 1991 initiatives were also requested in the FY 1990 budget.

FY 1991 Initiative	1990 Request ($K)
Computer Security	3,500
High Temperature Superconductors	700
Chemical Meas. & Stds	2,100
Lightwave Meas. Tech.	2,600
High Performance Composites	1,000
Scientific Computing Upgrade	3,122
Bioprocess Engineering	2,300

QUESTION:

What will be the consequences to NIST's basic measurement and research programs if these increases are not approved?

ANSWER:

At the present time, U.S. industry is facing critical challenges in the area of world-wide competition. Technology is ever more complex and "systems" oriented. Thus, industry is demanding more and better measurement research and services. As a result, NIST needs to strive for ever higher measurement accuracy, better in-factory measurements and needs to develop measurements and standards for entirely new technologies for which no such measurements and standards presently exist.

However, NIST has not been able to keep pace with these industrial needs. While the only Federal laboratory with the primary mission to support U.S. industry, our efforts to respond to the competitiveness crisis have been severely curtailed by zero real (inflation-adjusted) growth in Congressionally-appropriated funds over the past 15 years. Therefore, if the increases requested in this budget are not approved, NIST will continue to be limited in its ability to provide the measurement needs and services that assist U.S. industry to compete effectively in the world marketplace.

A good example of where U.S. industry needs ready access to state-of-the-art measurements and standards is in the area of semiconductors. Various performance characteristics on a semiconductor need to be more accurate than the current measurement capability. Without this greater accuracy, production will be made on a hit-or-miss basis. If highly accurate measurements become available, then:

- rejection rates will be lower,
- quality will be higher,
- production will be faster, and
- new products will be introduced more quickly.

Engineering Measurements and Standards

QUESTION:

You are requesting a total increase of $15,800,000 and 151 positions for Engineering Measurements and Standards. As part of this request you are asking for $3,900,000 and 41 additional positions for expanding measurement services for advanced semi-conductors. How is this program coordinated with other federal programs that have the same general objective, including the other national laboratories, university centers, and Sematech?

ANSWER:

NIST has a unique role in semiconductor measurements and standards which is recognized both in the private sector and in the government. NIST's contribution to the development of the measurement infrastructure is critical to the success of other federally or privately funded programs. The need for the NIST program is widely recognized in industry and in government. The President's budget contains an increase in this program because the larger program is needed to permit the continued advancement of the U.S. semiconductor industry.

Within the federal government, there are five agencies which have significant research and development programs in the semiconductor area: the Department of Commerce, the Department of Defense, the Department of Energy, the National Aeronautics and Space Administration, and the National Science Foundation. Each of these has their individual responsibilities. The Department of Commerce, through its NIST laboratories, provides generic measurements and services, national reference standards, carefully evaluated reference data, technical consultation on measurements, and theory. As one of many examples of the impact of NIST's work, NIST has developed a measurement method and standard reference material to determine the resistivity of silicon, the base material used in most semiconductor circuits today. Early studies showed that the method provided industry with savings that were more than 100 times greater than the cost of the NIST research. During the past five years, more than 180 companies have purchased the NIST standard reference materials (SRM's). A former vice president of ADE Corporation, referring to ADE's major market share of process control systems, said "The availability of Resistivity SRM's was a significant factor in developing and selling the nearly $50 million installed base of these systems."

The NIST is the only Federal laboratory established by law (the Omnibus Trade and Competitiveness Act of 1988) to assist industry in improving the quality of its products and manufacturing processes. This responsibility is fulfilled primarily through the development of the required underlying measurement science and technology. Industry recognizes the necessity for NIST to fulfill this role and the contributions that NIST has made. For example, R. Noyce, the Chief Executive Officer of SEMATECH, and other SEMATECH officials have written that "NIST must also address more fundamental, long range, topics which are of valid concern to the industry but which do not fit SEMATECH's charter to support directly. These activities need your support and, to be effective, they require a larger funding level to accelerate the solutions to key measurement problems." The President of KLA Instruments Corporation, Kenneth Levy, writes, "Mathematical theory and technique developed by NIST has been incorporated in our products and has helped us become one of the world's largest suppliers of image processing equipment."

The Department of Defense is developing the semiconductor technology that it requires for advanced weapons systems but which is not yet available in the private sector. When appropriate, the Department of Defense contracts with NIST to develop the measurement technology needed to support advances in semiconductor technology. At the end of a six year program, for example, DARPA reported that a program that they funded at what was then the National Bureau of Standards, "... improved purchased circuit yields by as much as 35 times...". The relevant staff from the Department of Defense recognize that NIST's responsibility is to provide broadly based generic measurement technology, but that the Department of Defense must fund any research needed to customize this measurement technology to their unique needs. NIST and the Department of Defense maintain continuing interaction to help meet the Nation's defense requirements as efficiently as possible.

The Department of Energy carries out research on semiconductors and semiconductor manufacturing technology because of weapons program requirements for state-of-the-art integrated circuits and to support the development of reliable, low cost photovoltaic systems. Like those in the Department of Defense, the programs in the Department of Energy are motivated by the Federal Government's own direct needs, i.e. where it is the principal user. Most of the Department of Energy research is conducted by contractor operated laboratories which it funds called national laboratories. NIST makes use of the facilities offered by these laboratories as appropriate. For example, NIST maintains a beam line at the National Synchrotron Light Source at Brookhaven National Laboratory which is used to determine the properties of semiconductor materials.

As a user of NIST research, the National Aeronautics and Space Administration focuses on meeting the need for space qualified semiconductor circuits, again an area in which the Government is the primary market. As an example of NASA's use of NIST's advances in measurement technology, NIST developed the first systems capable of nondestructively testing power semiconductor devices to their limits of failure. NASA used the system to characterize the power semiconductors in the main engine controllers of the space shuttle. Failures had occurred and replacement, once the device is installed, costs about $1 million. Now the candidate devices are tested with the NIST system and reliability is improved.

The National Science Foundation is responsible for funding basic research in universities. This research produces both basic knowledge and well trained students. The research results influence NIST's programs and the students trained are frequently hired by NIST. Moreover, there is ongoing coordination through such activities as jointly funded conferences, exchanges of staff, staff of each organization serving as advisors to the other.

Computer Sciences and Technology

QUESTION:

You are requesting an increase of $3.5 million and 36 positions for computer sciences and technology. Of this amount, $2.5 million and 24 positions would be allocated for programs under the Computer Security Act of 1987. What has been accomplished so far in carrying out the purposes of the Computer Security Act?

ANSWER:

The accomplishments to date responding to the Computer Security Act of 1987 include:

- Reviewing over 1,700 civilian agency and 28,000 defense department computer security plans;
- Publishing guidance to Federal agencies on:
  - A framework for security controls through the life cycle of a computer system;
  - Areas and topics that should be included in computer security awareness training courses;
  - Ways to improve computer security awareness among computer users, managers, and agency executives;
  - Technology and cost considerations in the selection of risk management techniques;

  - Computer viruses and related threats: a management guide and;
  - Proceedings of a workshop on integrity policy in computer information systems.
- Establishing a risk management laboratory; and
- Establishing the Computer System Security and Privacy Advisory Board.

QUESTION:

What additional activities would you carry out in FY 1991 with these additional resources?

ANSWER:

In the area of Computer Security, NIST will conduct research relating to distributed systems and networks and accelerate research on solutions to protecting data and software from computer viruses. These activities include specific programs to:

- Operate an Open Systems Interconnection Laboratory to investigate methods for network security by developing standards and conformance test methodologies.
- Establish an emergency response system to address current operational concerns about computer virus threats and operate a computer virus isolation and analysis laboratory.
- Conduct research on risk management methodology for distributed computer systems and publish guidance on issues and risks of using distributed database systems.
- Perform research to define audit trail requirements for operating systems that support distributed systems.
- Develop requirements for guide on contingency planning in distributed processing environments.

In the area of Integrated Services Digital Network (ISDN) Technology, NIST will accelerate the development of ISDN standards and achieve agreements on the implementation of specifications for the highest priority telecommunication products and services used by industry and the U.S. Government. These activities include:

- Develop and instrument selected standard high speed protocols, implementation agreements and test specifications.
- Work with industry, users, service developers and academia to provide measurement techniques, prototypes, agreements, and tests to ensure a national transparent interoperate ISDN in North America.

Research Support Services

QUESTION:

You are requesting an increase of $1 million for safety, system capacity, and obsolescence requirements for the NIST physical plant. How old is the physical plant, and what items do you plan to replace?

ANSWER:

The Gaithersburg site is 25 years old and the Boulder site is 35 years old. Safety projects include installation of fire sprinklers; replacement of sensor and intrusion alarms; and installation of standpipes, auxiliary water pumps and fire walls (Boulder). System capacity projects include chilled water for controlled temperature and humidity; electrical sub-station circuit breakers; and building electrical panels. Obsolescence projects include ineffective temperature and humidity control in our laboratories (e.g., the dimensional metrology laboratory), Reactor control panel, wet chemistry laboratories, shielded rooms, and clean room modernization.

QUESTION:

What plans do you have to replace other parts of the NIST physical plant?

ANSWER:

As requested by OMB in the FY 1991 passback, NIST is developing a Five Year Facilities Plan. In a preliminary study, NIST identified $40 million in acute problem areas which must be addressed over the next few years. A comprehensive engineering study by an outside contractor is planned.

Federal Technology Consortium for Technology Transfer

QUESTION:

How much does NIST expect to collect from Federal agencies in FY 1990 for the Federal Laboratory Consortium for Technology Transfer?

ANSWER:

NIST expects to bill Federal agencies for $1,552,000 in FY 1990. In past years, NIST has collected 80-90 percent of the amount billed. Some agencies have underpaid while other agencies contributed more than they were billed.

QUESTION:

How are the other Federal agencies' bills determined?

ANSWER:

The Federal Technology Transfer Act of 1986 specified that each Federal agency provide an amount equal to .005 percent (or $50 per $1 million) of the intramural R&D budgets of its combined laboratories. The Omnibus Trade Act subsequently revised the set aside percentage to .008 percent (or $80 per $1 million). Therefore, the other Federal agencies are billed based on a set-aside of .008 percent of their estimated intramural R&D budgets published by the National Science Foundation.

QUESTION:

Do you have authority to require each agency to pay the amount billed?

ANSWER:

Legislation does not provide NIST with a mechanism for enforcing the transfer of funds.

QUESTION:

Do you believe the FLC is accomplishing its mission?

ANSWER:

During the past two years, the FLC, the network that supports cooperation among the Federal laboratories and with potential collaborators, has been strengthened, and all FLC programs identified by the Technology Transfer Act of 1986 are operational. Emphasis has been on providing opportunities for person-to-person cooperation, strengthening the regional operations, and increasing training opportunities for member representatives. The FLC is working toward an increased awareness of the importance of technology transfer on the part of the laboratories, the agencies, and the potential users of innovations. Through the FLC work, past technology transfer successes are being documented, experiences are being shared, and the compatibility of laboratory missions and commercial opportunities is being recognized. Such technology-based cooperation may provide increasing benefits to the U.S. economy. The FLC may be a forum for collaboration between users of Federal research and government laboratories.

Questions Submitted by Congressman Carr

Fiscal Year 1991 Budget Request

QUESTION:

Are there funds in the NIST budget to establish additional Advanced Manufacturing Centers in the U.S.? If so, how many?

ANSWER:

Yes. We plan to establish one to two new centers.

QUESTION:

The '88 Trade Act calls for the Department of Commerce to implement a Market Development Cooperator Program and authorized $6 million funding for it. Can you provide any details on plans to implement the Cooperator Program? What is the funding level for this program?

ANSWER:

While authorized in the Trade Act, Commerce neither requested nor was appropriated any funding for the Market Development Cooperator Program.

QUESTION:

The President requested $198.4 million for NIST for FY '91 - an increase of $36.5 million over the current appropriation. The Advanced Technology Program however, received no increase over its current $10 million level of FY '90. With U.S. competitiveness in a number of critically important technological areas showing signs of decline -- why hasn't ATP received greater attention from the President? Did Commerce Department or OMB cut the funds?

ANSWER:

In its nearly 90 years of existence, most of NIST's research activities have been in direct support of technological advances in U.S. industry. Yet, for the first time in recent memory, the President has sought a significant increase in NIST's laboratory research. The increase was sought in recognition of the importance of NIST activities in developing enabling technologies with significance to the competitiveness of many U.S. industries.

The final conclusion of the budget review process was that the ATP program should start at the $10 million and establish itself. Future financial commitments will be considered at a late date.

QUESTION:

At the university level, researchers have developed new industrial biotechnology innovations but their research often ends proof of concept; they do not have the resources or incentive to develop technology further. And since the companies that could commercialize industrial biotechnology processes do not want to assume the financial risk of developing early-stage innovations to commercial application, most university-originated research remains in the lab, noncommercialized.

What has the Commerce Department done to address the problem?

ANSWER:

Measurements and standards are one important link between laboratory research in universities and commercial applications by industry. The Department of Commerce through the National Institute of Standards and Technology (NIST) provides that link. NIST is building an interdisciplinary program to address critical areas of biotechnology including bioprocess engineering needed for the development of new methods for producing pharmaceuticals, bulk and specialty chemicals, and alternative fuels via biochemical pathways. The FY 1991 budget request includes $2,300,000 and 29 positions to expand NIST's bioprocess engineering work. NIST's role is to develop the measurement, data, and generic product and process information tools needed by U.S. industry to accelerate the commercialization of bioproducts and thus ensure a significant share of the world biochemical market.

A key part of the NIST effort is the Center for Advanced Research in Biotechnology (CARB) a joint venture between NIST, the University of Maryland, and Montgomery County. Currently, CARB efforts are directed at characterizing the structure and function of proteins -the basic science of protein engineers. A far-reaching accomplishment of CARB is the recent completion of a Macromolecular Crystallization Database, which brings together for the first time all published data on the successful crystallization of proteins and nucleic acids. This personal computer database compiles information from a comprehensive review of scientific literature including many university publications. The database will facilitate the design of new products and advance knowledge of the function of proteins and enzymes. The data base is available to industry and to other interested users through the NIST Standard Reference Data Program.

The NIST Biotechnology program attracts numerous guest researchers from industry and universities who spend extended periods of time working at NIST on research of mutual interest. A current example is Professor Robert Allen, on sabbatical from the Medical University of South Carolina. Together, Dr. Allen and NIST researchers are developing methods of controlling electrophoretic media which will have a major impact on industrial focus areas of protein separation and identification, analysis of DNA products, and on DNA procedures.

NIST is the only government member of the MIT Biotechnology Process Engineering Center (BPEC), which was established as one of the NSF Engineering Research Centers and has more than 50 industrial members. Like NIST, BPEC takes an interdisciplinary approach to biotechnology, integrating the life sciences and bioprocess engineering with the goal of producing advanced manufacturing technologies.

NIST serves as a bridge between university and industry by coupling its technology transfer mechanisms with numerous academic research collaborations. These collaborations include:

-- Collaboration with Lehigh University (with Professor Humphrey, who is the President-Elect of the American Institute of Chemical Engineers) on the development of optical sensors for bioreactors.

-- Collaboration with the University of Pennsylvania (Professor Seider) in developing a pilot plant for the supercritical extraction of beta-carotene from natural products.

-- Collaborating with Colorado State University to characterize a lignite solubilization system.

-- Collaboration with the University of Maryland in Baltimore County, to enhance animal cell bioreactor technology.

As part of the NIST mission, NIST scientists play an active role on national and international standards and advisory committees. Over the past year, NIST scientists served on 15 such committees related to biotechnology. A major focus of NIST effort is the American Society of Testing and Materials (ASTM) Committee E-48 on Biotechnology. NIST was directly involved in the formation of the Committee and maintains a leadership role.

Over 50 seminars and workshops are sponsored each year at CARB. This year NIST will sponsor the conference "Frontiers in Bioprocessing II", to be held in Boulder, Colorado, June 17-27, 1990. Last year NIST staff gave over seventy talks on NIST biotechnology research at technical meetings, and at academic and industrial institutions. NIST scientists hold editorships on 8 journals on biotechnology-related research. These seminars, workshops, conferences, and editorships bring scientists from many different institutions to NIST and facilitate technology transfer.

NIST assures that its programs are addressing the most critical needs of industry through formal annual review panels by senior scientists from industry and academe. This program, administered by the National Academy of Science, has been enormously helpful in the evolution of the NIST biotechnology program. A current member of the review panel, Dr. Ralph Christoffersen, was recently Chairman of the Board of the Michigan Biotechnology Institute.

QUESTION:

In my own Congressional District in Lansing, Michigan, the Michigan Biotechnology Institute, which is ranked in the top 10 percent in technology transfer, has been very successful in taking early-stage technologies originating at universities in the Midwest and demonstrating their viability to a number of very large corporations interested in bioprocessing technologies.

MBI serves as a link between universities and industry and thus provides access to facilities, expertise and technology. What programs are there in Commerce or elsewhere in the federal government to promote this emerging and important market need and to assist start-up companies that are dedicated to deploying commercially ready bioprocessing processes?

ANSWER:

There are several programs in Commerce and elsewhere in the federal government that support start-up companies in the field of biotechnology. Cooperative Research and Development Agreements (CRDAs) are now used throughout the federal government. Since the passage of the Technology Transfer Act, which provided increased flexibility in such areas as assigning exclusive patent rights to a cooperating company, the use of these agreements, which may include universities as well, has been very helpful to industry and NIST.

The establishment of the Center for Advanced Research in Biotechnology (CARB) is an effort by NIST to assist start-up companies in biotechnology. A description of this effort is contained in the answer to the question above.

The National Science Foundation funds Engineering Research Centers (ERCs) which work closely with industry to transfer technology. NSF funded a biotechnology ERC at MIT for innovative research in biotechnology, engineering solutions for problems facing the industry, and training personnel to work in the field. NIST is the only federal government member of the MIT Biotechnology Process Research Center.

NIH has an active program to implement technology transfer to small business and biotechnology is an important component of its program in health sciences. The Office of Technology Transfer serves as the focal point. This office has negotiated 130 CRADAs (NIH version of CRDA notation) and over 25% of these are to small businesses. In addition, the NIH Small Business Innovative Research (SBIR) program has a policy that allows small businesses to use NIH SBIR grants as their financial contribution to CRADAs. Small business can therefore obtain intellectual input from NIH as well as funds for biotechnology.

The National Institute for General Medical Science provides grants for basic research for which industry is eligible. This entity is also responsible for formulating guidelines for recombinant DNA research and has an advisory committee to ensure the safety of this research. Although grantees are required to adhere to these guidelines, industry is benefiting from NIH technology in this area through voluntary adherence to these guidelines.

TUESDAY, MARCH 6, 1990.

GENERAL ADMINISTRATION

WITNESS

THOMAS J. COLLAMORE, ASSISTANT SECRETARY FOR ADMINISTRATION

OTTO J. WOLFF, DEPUTY ASSISTANT SECRETARY FOR ADMINISTRATION

SONYA G. STEWART, DIRECTOR FOR FINANCE AND FEDERAL ASSISTANCE

URIEL GOTTESMAN, DIRECTOR, OFFICE OF BUDGET OPERATIONS

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION

MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER [presiding]. First, let me apologize for being delayed. I had a group descend upon my office ten minutes ago.

The first item that we shall consider this morning is the FY 1991 budget. The request for the General Administration Salaries and Expenses appropriations request is $30,326,000. This amount is an increase of $2,505,000 above the appropriation for FY 1990.

We will insert the justifications submitted in support of this request into the record at this point.

[The justification follow:]

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

Budget Estimates, Fiscal Year 1991
Congressional Submission

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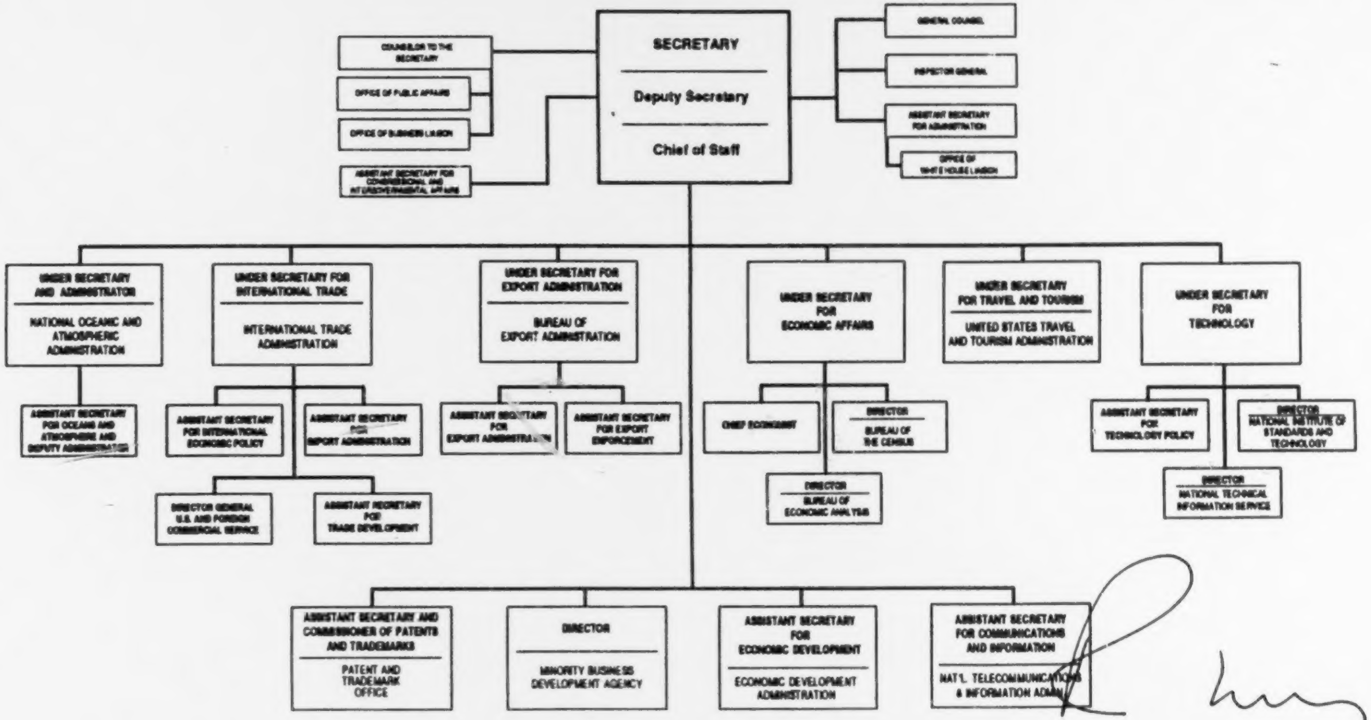
U.S. DEPARTMENT OF COMMERCE

EXHIBIT TO DOO 1-1


SECRETARY
Deputy Secretary
Chief of Staff
COUNSELOR TO THE SECRETARY
OFFICE OF PUBLIC AFFAIRS
OFFICE OF BUSINESS LIAISON
ASSISTANT SECRETARY FOR CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS
GENERAL COUNSEL
INSPECTOR GENERAL
ASSISTANT SECRETARY FOR ADMINISTRATION
OFFICE OF WHITE HOUSE LIAISON
UNDER SECRETARY AND ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE AND DEPUTY ADMINISTRATOR
UNDER SECRETARY FOR INTERNATIONAL TRADE
INTERNATIONAL TRADE ADMINISTRATION
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
ASSISTANT SECRETARY FOR IMPORT ADMINISTRATION
DIRECTOR GENERAL U.S. AND FOREIGN COMMERCIAL SERVICE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
UNDER SECRETARY FOR EXPORT ADMINISTRATION
BUREAU OF EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ADMINISTRATION
ASSISTANT SECRETARY FOR EXPORT ENFORCEMENT
UNDER SECRETARY FOR ECONOMIC AFFAIRS
CHIEF ECONOMIST
DIRECTOR
BUREAU OF THE CENSUS
DIRECTOR
BUREAU OF ECONOMIC ANALYSIS
UNDER SECRETARY FOR TRAVEL AND TOURISM
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
UNDER SECRETARY FOR TECHNOLOGY
ASSISTANT SECRETARY FOR TECHNOLOGY POLICY
DIRECTOR
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
PATENT AND TRADEMARK OFFICE
DIRECTOR
MINORITY BUSINESS DEVELOPMENT AGENCY
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
ECONOMIC DEVELOPMENT ADMINISTRATION
ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION
NAT'L TELECOMMUNICATIONS & INFORMATION ADMIN.

Approved Date

Amendment 23
September 7, 1989
GA-1

General Statement

The mission of the Department of Commerce is "to foster and promote and develop the foreign and domestic commerce... of the United States." This mission includes the responsibility to promote the economic security of the United States through growth and competitiveness. The Department seeks to fulfill this mission by: improving the international trade climate for American business and industry through expanded overseas markets for U.S. products and strengthened protection of intellectual property; promoting the expansion of industrial research and development and accelerating the commercial application of new technologies; providing accurate census data and useful economic forecasts and industry analyses; and managing effectively the oceanic and atmospheric resources of the Nation to achieve a balance between the protection of the environment and the harnessing of its resources for man's benefit.

In the FY 1990 Department of Commerce Appropriation Act, the Office of the Inspector General was made a separate appropriation. For ease of comparison, tabular presentation of amounts for FY 1989 for "Salaries and expenses" and for "Office of the Inspector General" are comparable wherever possible to the amounts requested for FY 1991. A comparison of the 1990 appropriations and the 1991 estimates, permanent positions, and related data on current employment is shown below:

(Dollar amounts in thousands)

Appropriation		1990 Appropriation Currently Available		1991 Estimate		Inc. (+) or Dec. (-)		Permanent Emp. as of 9/23
		Personnel	Amount	Personnel	Amount	Personnel	Amount	
Salaries and expenses.	Pos./BA	348	$ 27,821	356	$ 30,326	+8	+$2,505	301
	FTE/Obl.	317		325		+8		325
Office of the Inspector General. .	Pos./BA	209	13,331	214	15,115	+5	+1,784	177
	FTE/Obl.	197		202		+5		196
Total, General Administration .	Pos./BA	557	41,152	570	45,441	+13	+4,289	478
	FTE/Obl.	514		527		+13		521

The specific functions and programs of the Department that make up these broad activities are authorized by the Department's Organic Act (Act of February 14, 1903 Stat. 825) and by other legislation. They also include responsibilities transferred from other agencies by Presidential Reorganization Plans, as well as responsibilities assigned to the Secretary of Commerce by Executive Order or other actions of the President. The general administration of the functions and authorities of the Department is vested in the Secretary of Commerce. Overall policy direction of the thirteen operating bureaus is exercised through the Secretary, the Deputy Secretary, and the various Secretarial officers.

Significant improvements in the management and operation of the Department are planned in this budget. Among the improvements the Department will pursue in FY 1991 are:

- The improvement of oversight and management of procurement activities and major ADP systems acquisition.
- The continued implementation of a "single financial system" - the Financial and Management Information System (FMIS).
- The provision of uniform Departmental systems to simplify and make less expensive the acquisition of goods and services.
- The implementation of an automated system for producing the Commerce Business Daily.
- The continued development of a comprehensive Departmental program for the improvement of the quality of Commerce products and services, including the continued operation and promotion of the Pioneer fund, the Department's quality and productivity investment fund.
- The continued improvement of Departmental cash and debt management activities.
- Providing early warning capabilities by strengthening the Departmental management of the internal control program, expanding the scope of internal control reviews, and enhancing oversight for correction of material weaknesses and the conduct of internal control reviews.
- The improvement of the Department's audit resolution and follow-up activities, including implementation of a new automated tracking system.
- The expansion of the Office of the Inspector General's inspection activity to include the field operations of the U.S. and Foreign Commercial Service.

Appropriation Summary Statement

Appropriation: Salaries and Expenses

The appropriation "Salaries and expenses" provides for the executive direction of the Department of Commerce; for the principal support to the Secretary in formulating policy and providing advice to the President; and for Departmental staff services necessary for management and administration, including such functions as budget, planning, program evaluation, Congressional relations, public information, legal services, organization and management studies, personnel, financial systems, publications, and security.

The Department of Commerce seeks to foster, promote and develop domestic and foreign commerce of the United States by: stimulating productivity and economic development; furthering technological advancement and the balanced use of natural resources; and providing policy management and leadership for the Department's programs. In carrying out its goals the Department will: expand export opportunities and strengthen the international economic position of the United States; promote effective use and growth of the Nation's scientific and technical resources; analyze and disseminate information concerning the economy; manage the Nation's oceanic and atmospheric resources; and improve Departmentwide management through a greater concentration on programs and operational results.

The budget request for "Salaries and expenses" for 1991 is $30,326,000, which includes built-in changes of +$1,516,000 and program increases of +$989,000.

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990					$28,173
	Sequester applied, 1990					(352)
	Appropriation currently available, 1990	Pos./BA			348	27,821
		FTE/Obl.			317	27,821
	FY 1991 Adjustments to base:					
GA-12	Adjustment for 1990 pay increase and related costs			704		
GA-12	Other cost changes			812		
	Subtotal, adjustments to base:					1,516
	1991 Base	Pos./BA			348	29,337
		FTE/Obl.			317	29,337

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
GA-18	Executive direction	Pos./BA	37	$2,796	36	$2,875	36	$3,088	36	3,088	0	$0
		FTE/Obl.	33	2,649	32		32		32		0	
GA-21	Departmental staff services	Pos./BA	315	23,600	312	24,946	312	26,249	320	27,238	8	989
		FTE/Obl.	292	23,348	285		285		293		8	
	TOTAL	Pos./BA	352	26,396	348	27,821	348	29,337	356	30,326	8	989
		FTE/Obl.	325	25,997	317		317		325		8	

Note: For comparison purposes, the FY 1989 personnel and amounts for the Inspector General are reflected under its separate justification.

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Reimbursable Obligations	Pos./BA	31		26		26		26		0	
	FTE/Obl.	45	$30,983	36	$36,996	36	$36,852	36	$36,852	0	0
TOTAL	Pos./BA	31		26		26		26		0	
	FTE/Obl.	45	30,983	36	36,996	36	36,852	36	36,852	0	0

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$70,950	$64,817	$66,189	$67,178	$989
Financing:					
Offsetting collections from:					
Federal funds	(30,983)	(36,996)	(36,852)	(36,852)	
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year					
Unobligated balance transferred					
Unobligated balance, end of year					
Unobligated balance lapsing	437				
Budget Authority	40,404	27,821	29,337	30,326	989
Financing from proposed transfers:					
Sequester		352			
Appropriation	40,404	28,173	29,337	30,326	989

Note: Amounts in FY 1989 include both "Salaries and expenses" and "Office of the Inspector General", as shown in the President's FY 1991 Budget Appendix.

Department of Commerce
General Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Estimated Cost Changes:		
Personnel compensation		
Full-time permanent		1,062
Other than full-time permanent		9
Total, Personnel compensation	0	1,071
Civilian personnel benefits		178
Rental payments to GSA		152
Communications, utilities and miscellaneous charges		(57)
Printing and reproduction		69
Other services		92
Supplies and materials		11
Total	0	1,516

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

Object Class			FTE	Amount
11. and 12. Personnel Compensation and Benefits:				
Adjustment for 1990 pay increase and related costs				
Total cost in 1990 of pay increase				+704
Less amount absorbed		+$525,000		
Anticipated 1990 pay increase supplemental		(525,000)		
Amount in 1991 to provide full-year cost of pay increase		0		
Less amount absorbed		+704,000		
Subtotal, Adjustment for 1990 pay raise		0		
		+$704,000		

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, GA, S&E is absorbing the full cost of this pay increase.

Adjustment for 1991 pay increase and related costs				
Total cost in 1991 of general pay increase				+404
Less amount absorbed	+$478,000			
Subtotal, adjustment for 1991 general pay increase	(239,000)			
Total cost in 1991 of SES pay increase		+$239,000		
Less amount absorbed	+330,000			
Subtotal, adjustment for 1991 SES increase	(165,000)			
Total adjustment for 1991 pay increases		+165,000		
		+$404,000		

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

	FTE	Amount
Compensable days		+65
Civil Service Retirement System (CSRS)		(31)
Federal Employees' Retirement System (FERS)		+59

Compensable days . . . +65

The cost of one more compensable day in FY 1991 is calculated by dividing the FY 1990 estimate for personnel compensation and benefits by the number of compensable days, 260 for an increase of $64,508. (($14,944,000 + $1,828,000) / 260)

Civil Service Retirement System (CSRS) . . . (31)

The number of employees covered by CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System. We estimate the percentage of payroll of employees who are covered by CSRS will drop from 74.80 percent in 1990 to 71.80 percent in 1991. This will result in a decrease of 3.0 percent in the cost of CSRS contributions, for a decrease of $31,382. ($14,944,000 x .07 x .03)

Federal Employees' Retirement System (FERS) . . . +59

The number of employees covered by the FERS will continue to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 25.2 percent in 1990 to 28.2 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.0 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($14,944,000)	
Basic benefit cost in 1990 ($14,944,000 x .252 x .1297)	$488,436
Basic benefit cost in 1991 ($14,944,000 x .282 x .13)	547,847
Increase in basic benefit contributions (1991 - 1990)	+$59,411

	FTE	Amount
Thrift Plan		+9

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of employees covered by FERS will increase by 3.0 percent, from 25.2 percent in 1990 to 28.2 percent in 1991. We estimate the agency contribution will be 2 percent. The increased cost for contributions to the Thrift Savings Plan are:

Total Thrift Savings Plan increase ($14,944,000 x .03 x .02)	+$8,966

	FTE	Amount
Federal Insurance Contributions Act (FICA)		+36

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in 1991 from $50,025 in 1990; therefore, the percentage of salary subject to FICA will increase from 86.93 percent in 1990 to 89.14 percent in 1991. The OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in 1991. This will result in an increase of $31,275 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 ($14,944,000 x .2520 x .8693)	$3,273,686	
FERS OASDI tax in 1990 ($3,273,686 x .0617)		$201,986
FERS payroll subject to FICA tax in 1991 ($14,944,000 x .2820 x .8914)	3,756,545	
FERS OASDI tax in 1991 ($3,756,545 x .0620)		232,906
Increase (1991 - 1990)		+$30,920
Other payroll not covered by retirement systems ($218,000)		
Other payroll subject to FICA tax in 1990 ($218,000 x .8693)	$189,507	
OASDI tax in 1990 ($189,507 x .0617)		$11,693
Other payroll subject to FICA tax in 1991 ($218,000 x .8914)	194,325	
OASDI tax in 1991 ($194,325 x .0620)		12,048
Increase (1991 - 1990)		+355
Total OASDI increase		+$31,275

			FTE	Amount
Medicare:				

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 86.93 percent in 1990 to 89.14 percent in 1991 as the maximum salary subject to FICA increases. The cost of medicare will increase as follows:

Total payroll subject to FICA in 1990 ($15,162,000 x .8693)	$13,180,327			
Total payroll subject to FICA in 1991 ($15,162,000 x .8914)	13,515,407			
Increase in payroll subject to FICA (1991 - 1990)	+$335,080			
Increase in Medicare tax ($335,080 x .0145)		+$4,859		
Employees Compensation				+3

The Office of Workers Compensation Programs Charge Back Billing received in August, 1988 was $216,671.26. The bill in August, 1989 is $219,216.45. The difference is $2,545.19 for an adjustment to base of $3,000.

	FTE	Amount
Total, Personnel compensation and benefits	0	+1,249
23.1 Rental payments to GSA		+152

The GSA estimates a 4.4 percent increase for the FY 1991 rent payment. Applied against a base of $3,457,000 the increase is $152,108.

23.3 Communications, Utilities and Miscellaneous Charges

	FTE	Amount
Federal Telecommunications System - 2000		(57)

Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

	FTE	Amount
24. Printing and reproduction		+69

Government Printing Office

An additional $69,230 is required in FY 1991 to cover GPO's estimated increase in printing costs (labor, paper and commercial procurement). This increase of 7 percent is applied against a base of $989,000 in GPO printing orders for publishing the Commerce Business Daily.

25. Other Services

	FTE	Amount
Working Capital Fund charges . . . . The General Administration's Working Capital Fund charges necessary to maintain the current level of operations has increased by $92,000 over a base of $2,897,000.		+92
26. Supplies and Materials. . . . . The increase in supplies and materials is based on the 1991 GNP deflator 4.2 percent. Applied against a base of $250,000, the increase is $10,500.		+11
Total FY 1991 Adjustments to Base and Built-in Changes	0	+1,516

Appropriation Language and Code Citations:

Appropriation: Salaries and Expenses

1. For expenses necessary for the general administration of the Department of Commerce provided for by law,

15 U.S.C. 1501

15 U.S.C. 1501 provides that: "There shall be...the Department of Commerce, and a Secretary of Commerce, who shall be the head thereof..." The sections which follow 15 U.S.C. 1501 establish various Assistant Secretaries and define general powers and duties of the Department.

2. Including not to exceed $2,000 for official entertainment, $30,326,000.

No specific authority

5 U.S.C. 5536 prohibits additional pay or allowance to employees unless the appropriation therefore specifically states that it is for the additional pay or allowance.

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Executive direction of the department

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity:											
Secretary	Pos./BA	10	$879	10	$906	10	$977	10	$977	0	0
	FTE/Obl.	12	956	8		8		8			
Deputy Secretary	Pos./BA	9	642	9	643	9	689	9	689	0	0
	FTE/Obl.	5	573	7		7		7			
Executive Secretariat	Pos./BA	10	540	9	588	9	638	9	638	0	0
	FTE/Obl.	10	552	10		10		10			
Assistant Secretary for Administration	Pos./BA	8	735	8	738	8	784	8	784	0	0
	FTE/Obl.	6	568	7		7		7			
Total	Pos./BA	37	2,796	36	2,875	36	3,088	36	3,088	0	0
	FTE/Obl.	33	2,649	32		32		32		0	

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Goals and Objectives

GOALS: The Department of Commerce seeks to foster, promote and develop domestic and foreign commerce of the United States by stimulating productivity and economic development; furthering technological advancement and the balanced use of natural resources; and providing policy, management and leadership for the Department's programs.

OBJECTIVES: In carrying out its goals, the Department of Commerce will: expand export opportunities and strengthen the international economic position of the United States; promote effective use and growth of the Nation's scientific and technical resources; analyze and disseminate information concerning the economy; manage the Nation's oceanic and atmospheric resources; and improve Departmentwide management through a greater concentration on programs and operational results.

Base Program FY 1991

This activity provides funding for the Secretary, Deputy Secretary, Executive Secretariat, and Assistant Secretary for Administration. These offices, collectively, have chief responsibility for all matters affecting policy, programs, and functions assigned to the Department. This responsibility includes the overall management of the Department of Commerce and the representation of the Administration before the public, the business community, the Congress and other Executive agencies and departments.

A summary of the individual offices and their specific areas of responsibility follows:

Secretary	Establishes the overall policy directions of the Department; determines priorities; and provides for the organization and general management of the Department.
Deputy Secretary	Serves as the principal advisor to the Secretary on all matters affecting the Department, and performs continuing and special duties the Secretary may assign. The Deputy Secretary is charged by law with performing the duties of the Secretary in case of absence, sickness, death or resignation of the Secretary. Also contained in this office is an Associate Deputy Secretary who is the principal assistant to the Deputy Secretary in managing the day-to-day operations of the Department.

Executive Secretariat	Provides control over incoming correspondence addressed to the Secretary and Deputy Secretary; reviews all materials for the Secretary and Deputy Secretary for compliance with rules, instructions and standards of the Department; maintains an accurate and current correspondence suspense system; advises principal officials of the Department of Secretarial actions or decisions affecting their areas of responsibility; and maintains permanent official files for the Secretary and Deputy Secretary.
Assistant Secretary for Administration	Functions as the principal advisor to the Secretary and as chief officer of the Department on matters of administrative management, and oversees the management of five staff offices. The authority of the Secretary on administrative management matters such as personnel, budget, organization, procurement, administrative services, environmental compliance, and finance is delegated by the Secretary to the Assistant Secretary for Administration. Also contained in this office is the Deputy Assistant Secretary for Administration.

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Departmental staff services

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity:											
Space Commerce	Pos./BA	0	$0	5	$320	5	$387	6	$487	1	$100
	FTE/Obl.	0	0	5		5		6		1	
General Counsel	Pos./BA	19	1,403	19	1,449	19	1,558	19	1,558	0	0
	FTE/Obl.	18	1,455	17		17		17			
Congressional and Intergovernmental Affairs	Pos./BA	23	1,843	22	1,698	22	1,783	22	1,783	0	0
	FTE/Obl.	21	1,772	19		19		19			
Public Affairs	Pos./BA	7	493	6	599	6	627	6	627	0	0
	FTE/Obl.	7	527	6		6		6			
Business Liaison	Pos./BA	12	827	11	889	11	935	11	935	0	0
	FTE/Obl.	11	818	11		11		11			
Consumer Affairs	Pos./BA	4	266	3	300	3	312	3	312	0	0
	FTE/Obl.	4	271	3		3		3			

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Activity: Departmental staff services

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Director for Finance and Federal Assistance	Pos./BA	31	2,111	30	2,238	30	2,352	31	2,469	1	117
	FTE/Obl.	28	1,949	28		28		29		1	
Director for Management and Information Systems	Pos./BA	29	2,529	28	2,594	28	2,702	31	3,083	3	381
	FTE/Obl.	30	2,677	25		25		28		3	
Director for Personnel and Civil Rights	Pos./BA	62	4,380	61	4,750	61	4,996	61	4,996	0	0
	FTE/Obl.	54	4,297	58		58		58		0	
Director for Budget, Planning and Organization	Pos./BA	71	5,114	71	5,302	71	5,588	71	5,588	0	0
	FTE/Obl.	68	4,768	66		66		66		0	
Director for Procurement and Administrative Services	Pos./BA	57	4,634	56	4,807	56	5,009	59	5,400	3	391
	FTE/Obl.	51	4,814	47		47		50		3	
Total	Pos./BA	315	23,600	312	24,946	312	26,249	320	27,238	8	989
	FTE/Obl.	292	23,348	285		285		293		8	

Department of Commerce
General Administration
Salaries and Expenses
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Goals and Objectives

GOALS:	To manage planning, budget, evaluation, Congressional relations, public information, legal services, administrative support, information systems, personnel and financial operations of the Department.
OBJECTIVES:	The responsibilities of the eleven offices which comprise Departmental Staff Services are discussed below:
Space Commerce	To facilitate and foster commercial space development; and to assure effective coordination of the Department's activities related to the commercial space industry.
General Counsel	To act as the chief legal officer of the Department; to modernize domestic statutes to reflect the changing nature of the world economy; to supervise, manage, and provide policy for legal operations of the Department, including provision of advice, guidance and representation on matters involving all components and programs of the Department except for the issuance of patents and the registration of trademarks; to develop the Department's legislative and regulatory programs; to heighten the ability to contribute to policy development and related legislative initiatives in such key areas as antitrust laws which serve to help increase the competitiveness of U.S. firms; and to coordinate the Department's involvement in other Federal agencies' regulations that may impair U.S. industry growth and competitiveness or have unforeseen economic consequences.
Congressional and Intergovernmental Affairs	To present the Administration's and Department's programs and legislation to Congress, particularly in the areas of trade, product liability, foreign corrupt practices, communications and tort reform; and to oversee the policy and planning functions of all DOC Congressional Liaison offices. To act as liaison between state, county, municipal and Indian Tribal governments and their associations in matters of information requests and assistance regarding Departmental programs.
Public Affairs	To direct and coordinate public affairs activities of the Department, particularly those related to the areas of the economy, trade, productivity, and technology; and to improve the effectiveness of communications with other government agencies, the news media and the private sector.
Business Liaison	To promote the involvement of the business community in setting and accomplishing Departmental goals; and to manage and publicize a technical assistance and referral service on Government information for business.

Consumer Affairs	To help the business community improve customer relations; to provide liaison with consumer organizations and with state, county, and municipal consumer protection agencies; and to respond to consumer complaints.
Director for Finance and Federal Assistance	To act as the senior staff office in formulating, analyzing, coordinating, and implementing financial management and financial assistance policies Departmentwide. Such policies include the debt management, cash management, A-76, travel management and federal assistance programs. To oversee the budget of the Office of the Secretary, and to carry out accounting operations and operate accounting systems for the Department.
Director for Management and Information Systems	To act as the senior staff office with respect to planning, developing, implementing and evaluating policies and procedures related to automated and non-automated information systems for the Department. These responsibilities include: developing policies on information resources and computer and telecommunications technology; implementing and administering the integration of the Department's administrative, financial and programmatic management information systems; and overseeing the Department's central computer facility.
Director for Personnel and Civil Rights	To act as the senior staff office in formulating and implementing personnel, safety, health, and civil rights policies Departmentwide.
Director for Budget, Planning and Organization	To act as the principal staff advisor to senior management on all aspects of the Federal Budget Process; provide guidance to Departmental operating units on budget formulation and execution; monitor operating unit compliance with legal and regulatory requirements of the budget process; and maintain liaison with OMB and Congress on the Department's budget request.
	To serve as the principal staff advisor to senior management concerning long-range planning, the efficient utilization and distribution of resources Departmentwide, the implementation of major departmental goals and the assessment of the quality of program operations. This responsibility includes: providing a staff review of bureau operations; undertaking programmatic evaluations of Departmental programs and managing the Department's Management By Objectives system; and conducting a long-range planning process and undertaking special assignments.
	To act as the senior staff office for both Departmentwide and Governmentwide management improvement activities. These activities include: the Department's quality and productivity improvement program; the development of interagency cross-servicing arrangements to improve internal management and service delivery to the public, management and organizational analysis; internal control oversight; audit follow-up and GAO liaison; the administration of the Freedom of Information and Privacy Acts; GAO committee management; directives, forms and records management; and paperwork reduction and information collection programs.

Director for Procurement and Administrative Services	To act as the senior staff office with respect to the improvement of the management and delivery of administrative support services for the Office of the Secretary and other elements of the Department. This responsibility includes carrying out the Secretary's responsibility to publish promptly the Commerce Business Daily; planning, developing and implementing policies and procedures for the acquisition of materials, supplies, equipment and services through procurement and contracting processes; developing and implementing policies and procedures and performing oversight in support of administrative services; planning, developing, and implementing policies and procedures to prevent pollution and achieve Departmental compliance with environmental laws; implementing management information systems in procurement, personal and real property; managing work space; providing guidance and supervision of the Small and Disadvantaged Business Utilization program; and administering the Department's national security and emergency preparedness programs.

Base Program FY 1991

This activity provides central staff support to the senior management of the Department. Through such assistance, the Secretary is able to plan, supervise, and direct the full resources and programs of the entire Department to execute his obligations under law and to further the goals and objectives of the Department. Collectively, the offices ensure coordination among the bureaus' interrelated programs; provide legal advice and review on a wide range of matters; promote the efficient utilization of resources; maintain liaison activities with the Congress, and the business, consumer affairs and general public communities; and provide policy advice on matters affecting long-range plans and budgets, personnel, civil rights, procurement, organization, information and management systems Departmentwide.

A summary of the individual offices and their specific areas of responsibility follows:

Space Commerce	Provides advice and counsel for promoting economic conditions that foster commercial space development; and provides assistance in coordinating the Department's activities related to the commercial space industry in order to create an environment that supports maximum private sector investment in space.
General Counsel	Provides substantive legal counsel in a wide range of areas; ensures the preparation, review, and clearance of all expressions of official opinion on proposed or pending legislation, policy; and represents the Department in legal proceedings before such bodies as regulatory commissions, independent commissions, independent boards, similar tribunals and courts.

Congressional and Intergovernmental Affairs	Presents the Administration's and Department's programs and legislation to Congress with emphasis on the areas of trade, productivity, new business and communications; and coordinates the policy and planning functions of all the Congressional Liaison offices of Commerce. Provides a central point of contact and assistance for state and local governments seeking information on Department programs; provides and coordinates outreach functions to local governments; and provides oversight of the Department's implementation of various Presidential proposals and objectives.
Public Affairs	Plans, develops, and carries out a Departmentwide public information program to support major Departmental priorities and to meet the needs of individual operating units. Prepares and issues press releases and broadcasting materials involving Departmental officials. Conducts all public relations activities; acts as liaison to promote consistency and coordination between the Department, Executive Branch and the private sector on public information activities.
Consumer Affairs	Provides assistance to businesses with customer relations problems and to consumers with complaints. Informs constituents (corporate consumer affairs directors, state and local government consumer agencies, and consumer organizations) of Departmental programs and policies; and informs Departmental officials of constituents' positions on Commerce-related issues.
Business Liaison	Acts as the Department's liaison and coordinator with the business community. Serves as the central point of contact to provide outreach and consultation with the business community on business needs and concerns. Promotes business involvement in significant Department policy making and program development.
Director for Finance and Federal Assistance	Develops policies and procedures and provides guidance and technical assistance to operating components regarding all financial matters. Establishes and implements Departmental and central agency initiatives for debt management and cash management and ensures compliance with OMB Circular A-76 requirements and principles. Provides liaison and reporting to the General Services Administration regarding travel policy and management. Develops and coordinates implementation of policies and procedures for all financial assistance programs (grants, loan, and guarantees), and serves as liaison for financial assistance matters with outside agencies including OMB and Treasury. Provides program management, oversight, coordination, and analysis, and serves as the principal consultative and advisory activity for these matters. Ensures programs, policies, systems, and processes are integrated, and coordinated. Evaluates the design and operation of financial, payment, budget, and grants programs. Develops and conducts long-range financial program design planning, including policy development agenda.

Director for Management and Information Systems

Develops and implements long-range plans for the Department's Information Management and Technology Program in accordance with the Paperwork Reduction Act (P.L. 96-511) and the Brooks Act (P.L. 89-306); develops and implements plans for upgrading the Departmental computing and telecommunications services and facilities.

Coordinates management information requirements among Departmental components and integrates them to support the Department's Financial and Management Information System.

Director for Personnel and Civil Rights

Provides overall direction of the Department's personnel policy, planning, and management systems. Oversees workforce planning, labor-management relations, employee health, management training, implementation, and evaluation. Provides policy and program management for the safety and health of employees.

Conducts activities to ensure equal employment opportunity in the Department including: affirmative action; non-discrimination in Federally-assisted programs; and the investigation, adjudication, development, and reporting of final decisions on EEO complaints.

Director for Budget, Planning and Organization

Provides overall direction to the Department's budget process. Issues budgetary guidance and direction to all Commerce units and acts as liaison for budget activities with the legislative and executive branches. Acts as principal advisory group to the Assistant Secretary for Administration, Deputy Secretary and Secretary on budgetary issues. Reviews all budget requests and makes recommendations to the Secretary on funding and staffing levels for programs within the Department. Transmits all Congressional and Executive level budget guidance to the Department's operating units. Participates in legislative reviews of operating programs. Coordinates and prepares all budget related briefings, press releases and news briefings on the Secretarial, Office of Management and Budget, and Congressional budget submissions. Is focal point for review, analysis and monitoring of major, multi-year systems and projects. Participates in development and implementation of the Department's Financial and Management Information System, with specific responsibility for Budget Formulation and Management Information subsystems.

Provides guidance to all Commerce units on the development of long-range plans; and facilitates review and approval of plans by the Deputy Secretary and Assistant Secretary for Administration. Manages the Department's Management By Objectives (MBO) system; operates the Decision Analysis Center; and conducts and reviews evaluation of Departmental programs.

Provides in-house management consulting services to top officials. Leads Departmental participation in Governmentwide quality, productivity and management improvement initiatives. Manages projects which support Department internal management and service delivery improvement. Conducts management evaluations and organizational reviews. Administers the Department's directives, internal control, audit follow-up and GAO liaison activities. Supports the Department's control system for advisory and assistance contracts.

Director for Procurement and Administrative Services

Provides overall direction in developing, coordinating, implementing, and supporting other Departmental units in policies, programs, and activities which govern or affect the procurement of all equipment, materials and services for the Department; develops supporting automated systems; and conducts oversight reviews of policy implementation.

Develops and implements policy, maintains oversight, and oversees automated systems requirements in support of administrative services.

Provides policies and procedures for Departmental programs to prevent pollution and achieve compliance with environmental laws.

Provides facilities support services nationwide, and manages the operations and maintenance of the Herbert C. Hoover Building, and other buildings occupied by Commerce personnel, which includes acting as coordinator on all major National Capital Region facility management activities; serves as Departmental liaison on historic preservation; and provides management for alterations and renovations, telecommunications services and other support activities.

Provides policies and procedures for programs of physical information, and personnel security, as well as emergency preparedness within the Department.

Acts as the focal point on matters concerning utilization of small and disadvantaged businesses in Departmental contracts in compliance with the Small Business Act (15 U.S.C. 644k) and Public Law No. 95-507, Sections 8 and 15.

Responsible for carrying out the Secretary's responsibility to publish promptly the Commerce Business Daily, executive Agency procurement notices in accordance with Section 8(e)(2) of the Small Business Act, as amended (15 U.S.C. 637(e)(2)), and Section 18(a)(2) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 416(a)(2)).

Department of Commerce
General Administration
Salaries and Expenses
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Departmental Staff Services.	Pos/BA	312	$26,249	320	$27,238	8	$989
	FTE/Obl.	285		293		8	

Departmental Management Oversight Initiatives (8 FTE, +$989,000) - This request will strengthen management oversight activities in three different areas: coordination of Department of Commerce (DOC) space commerce activities, procurement and implementation of major information systems, and financial management systems improvement.

DOC Space Commerce Management. For coordinating DOC program activities affecting space commerce in the National Oceanic and Atmospheric Administration, Technology Administration, International Trade Administration, and other DOC bureaus, and for enhancing data collection and analysis, an increase of $100,000 and 1 FTE is requested. This will greatly facilitate the Department's efforts to disseminate to the space commerce industry information on key business issues involving finance, insurance, major industry trends, and foreign competition. DOC seeks to foster U.S. commercial space development, for it may offer the country a new arena for economic expansion in an area where the U.S. technology is still dominant. Further, space derived technology effectively diffused into traditional industries can help restore and maintain a competitive international position.

Major Systems Oversight. The Department has a number of initiatives underway to apply new technologies in order to meet program demands and objectives, such as, modernizing the weather service, upgrading technologies for conducting censuses, automating office functions in the Patent and Trademark Office, and implementing a Departmental financial management and information system, among others. In FY 1990 the Department is spending $449 million on information technology. Not only are considerable resources involved, but programs depend on these new technologies to accomplish their mission. Acquiring new systems is a complex task, involving a range of systems, procurement and management issues. To ensure that these new technologies produce the desired result without an escalation in cost, the Department must have additional resources: to seek out potential problems before they occur and are costly to correct; to ensure that program objectives will be accomplished with the application of these new technologies; and to ensure that acquisition plans provide strong checks and balances for system performance and program compatibility.

For conducting procurement oversight of major systems acquisition, planning, and implementation, an increase of $391,000 and 3 FTE is requested. This effort involves review and approval of acquisition plans, monitoring the acquisitions to ensure compliance with Federal statutes and regulations and good business practices, conducting on-site reviews, and reviewing documentation to ensure its adequacy prior to key decision points in the acquisition cycle. Providing for these key decision points may determine the ultimate success of the automation effort, both in terms of cost and effectiveness.

Also, for the technical aspects of major systems oversight, an additional $381,000 and 3 FTE is requested. The technical review evaluates system capability to user requirements, total costs over the life cycle of the system, alternatives to minimize future costs for maintenance, upgrading and modification, and the success of system tests and demonstration projects. Funds are also included to contract for independent assessments involving critical major information system initiatives.

Financial Management System. To provide leadership and guidance for the Department's efforts to upgrade and enhance financial management systems throughout the Department, including the creation of a single, integrated Financial and Management Information System (FMIS) and for ensuring that financial management practices and procedures support the Department's management and decision-making processes, an increase of $117,000 and 1 FTE is requested. Additional support is needed to coordinate and focus financial management improvement activities of the Office of the Secretary and the bureaus so that they must directly serve the long term goals of providing better, more timely data to decision-makers and of assuring full accountability.

	1991	1992	1993	1994	1995
Direct Obligations	989	989	989	989	989
Budget Authority	989	989	989	989	989
Outlays	947	975	989	989	989
FTE	8	8	8	8	8

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: DEPARTMENTAL STAFF SERVICES

Program Change: DEPARTMENTAL MANAGEMENT OVERSIGHT INITIATIVES

		1991
Object Class		Increase
11	Personnel compensation	
11.1	Full-time permanent	371
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	371
12.1	Civilian personnel benefits	93
21	Travel and transportation of persons	78
22	Transportation of things	0
23.1	Rental payments to GSA	30
23.3	Communications, utilities and miscellaneous charges	12
24	Printing and reproduction	37
25	Other services	315
26	Supplies and materials	13
31	Equipment	40
99	Direct obligations	989

Department of Commerce
General Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: DEPARTMENTAL STAFF SERVICES
Program Change: DEPARTMENTAL MANAGEMENT OVERSIGHT INITIATIVES

Title:	Grade	Number	Annual Salary	Total Salaries
Supervisory Procurement Analyst	15	1	61,289	61,289
Procurement Analyst	14	2	52,104	104,208
Financial Management Specialist	14	1	52,104	52,104
Computer Specialist	13	3	44,092	132,276
Telecommunications Specialist	13	1	44,092	44,092
Total		8		393,969
Less lapse (5.8%)		0		(22,850)
Total full-time permanent		8		371,119

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	8
Other than full-time permanent	
Total	8
Authorized Positions:	
Full-time permanent	8
Other than full-time permanent	
Total	8

Department of Commerce
General Administration
Salaries and Expenses

PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Activity: Reimbursable Program

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity: Reimbursable Program	Pos./BA	31		26		26		26		0	
	FTE/Obl.	45	$30,983	36	$36,996	36	$36,852	36	$36,852	0	0
TOTAL	Pos./BA	31		26		26		26		0	
	FTE/Obl.	45	30,983	36	36,996	36	36,852	36	36,852	0	0

Goals and Objectives

GOALS: To provide a centralized source of funding for special tasks and functions of a non-permanent nature.

OBJECTIVES: To facilitate charging individual bureaus for centralized billings received by the Department of Commerce; and to conduct special programs of Departmentwide application.

Base Program FY 1990

Activities in the program include such functions as: screening and recommending qualified candidates for executive positions in the Department; helping qualified high school students stay in school through the Junior Technician program; providing centralized funding for services rendered for Departmentwide initiatives; and providing a central billing source for local telephone services and for the GSA rent charges for the Herbert C. Hoover building.

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	15,337	15,708	371
11.3	Other than full-time permanent	479	479	0
11.5	Other personnel compensation	298	298	0
11.9	Total personnel compensation	16,114	16,485	371
12.1	Civilian personnel Benefits	2,877	2,970	93
21	Travel and transportation of persons	250	328	78
22	Transportation of things	13	13	0
23.1	Rental payments to GSA	3,625	3,655	30
23.3	Commun., util., misc. charges	425	437	12
24	Printing and reproduction	1,225	1,262	37
25	Other services	4,231	4,546	315
26	Supplies and materials	256	269	13
31	Equipment	321	361	40
99	Total, Direct Obligations	29,337	30,326	989
	Reimbursable Obligations	36,852	36,852	0
	TOTAL OBLIGATIONS	66,189	67,178	989

Department of Commerce
General Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-Time Equivalent Employment:			
Full-time permanent	302	310	8
Other than full-time permanent	15	15	0
Subtotal, Direct	317	325	8
Reimbursable	36	36	0
Total	353	361	8
Authorized Positions:			
Full-time permanent	336	344	8
Other than full-time permanent	12	12	0
Subtotal, Direct	348	356	8
Reimbursable	26	26	0
Total	374	382	8

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	$378	$378	$0
	Senior executive service	2,413	2,413	0
	General schedule	12,546	12,917	371
	Subtotal	15,337	15,708	371
11.3	Other than full-time permanent			
	General schedule	479	479	0
	Subtotal	479	479	0
11.5	Other personnel compensation			
	Overtime	27	27	0
	SES performance awards	80	80	0
	Cash awards	61	61	0
	PMRS awards	130	130	0
	Subtotal	298	298	0
11.9	Total personnel compensation	16,114	16,485	371

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits			
	Civil service retirement	757	785	28
	Federal employees' retirement	685	720	35
	Thrift savings plan	105	112	7
	Federal insurance contribution act	435	445	10
	Health insurance	638	648	10
	Life insurance	37	40	3
	Employees' compensation fund	220	220	0
	Other	0	0	0
	Subtotal	2,877	2,970	93
21	Travel and transportation of persons			
	Common carrier	139	172	33
	Mileage	7	8	1
	Per diem/actual	84	127	43
	Vehicular	14	15	1
	Other	6	6	0
	Subtotal	250	328	78
22	Transportation of things	13	13	0
23.1	Rental payments to GSA	3,625	3,655	30

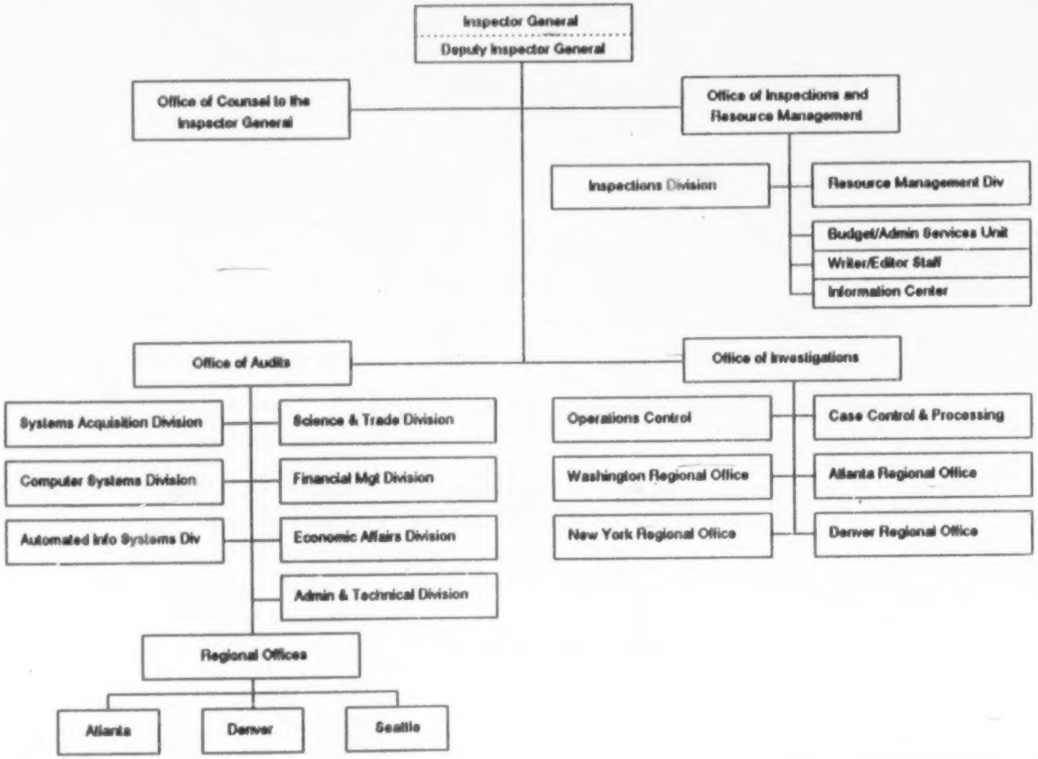
Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
23.3	Communications, utilities and miscellaneous charges	0	0	0
	Rental of ADP equipment	1	1	0
	Rental of office copying equipment	2	2	0
	Other equipment rental	2	2	0
	Federal telecommunications system	112	121	9
	Other telecommunications services	204	204	0
	Postal Service by USPS	82	85	3
	Other	22	22	0
	Subtotal	425	437	12
24	Printing and reproduction			
	Publications	118	118	0
	Other	1,107	1,144	37
	Subtotal	1,225	1,262	37
25	Other services			
	Training:			
	University	4	4	0
	Office of personnel management	28	28	0
	Other	69	83	14
	Maintenance of equipment	63	63	0
	GSA reimbursable services	60	60	0
	ADP services	10	10	0
	Telecommunications services	2	2	0
	Payments to GA, WCF	3,133	3,213	80
	Other Federal Agencies	313	313	0
	Other	549	770	221
	Subtotal	4,231	4,546	315

Department of Commerce
General Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

		1991 Base	1991 Estimate	Increase/ (Decrease)
26	Supplies and materials			
	Office supplies	165	178	13
	ADP supplies	51	51	0
	Other	40	40	0
	Subtotal	256	269	13
31	Equipment			
	Office machines and equipment	233	273	40
	ADP hardware	50	50	0
	ADP software	10	10	0
	Other	28	28	0
	Subtotal	321	361	40
99	Subtotal, Direct Obligations	29,337	30,326	989
	Reimbursable Obligations	36,852	36,852	0
	TOTAL OBLIGATIONS	$66,189	$67,178	$989

U. S. DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL
ORGANIZATION CHART


Inspector General
Deputy Inspector General
Office of Counsel to the Inspector General
Office of Inspections and Resource Management
Inspections Division
Resource Management Div
Budget/Admin Services Unit
Writer/Editor Staff
Information Center
Office of Audits
Systems Acquisition Division
Science & Trade Division
Computer Systems Division
Financial Mgt Division
Automated Info Systems Div
Economic Affairs Division
Admin & Technical Division
Regional Offices
Atlanta
Denver
Seattle
Office of Investigations
Operations Control
Case Control & Processing
Washington Regional Office
Atlanta Regional Office
New York Regional Office
Denver Regional Office

GA-41

Appropriation Summary Statement

Appropriation: Office of the Inspector General

The appropriation "Office of the Inspector General" provides for the detection and the prevention of fraud, waste, abuse and mismanagement of government funds in Commerce programs and operations; the promotion of economy and efficiency in Commerce operations; and assistance to the Department in reducing costs and in providing more effective delivery of programs.

The Office of the Inspector General performs agency-wide audits, inspections and investigations to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste and mismanagement. In carrying out these responsibilities the Office will concentrate on those programs and operations which have the greatest potential for identifying fraud, recovering funds, precluding unnecessary outlays, and improving management.

Accomplishments planned for FY 1991 include:

- o Increasing the number of inspections, expanding the scope of inspections to include the U.S. and Foreign Commercial Service field operations.
- o Improving the value of the Inspector General's findings and recommendation to senior Department management.
- o Enhancing the Inspector General's ability to review areas of high technology, especially automated data processing systems.

The budget request for "Office of the Inspector General" for 1991 is $15,115,000, which includes built-in changes of +$877,000 and program increases of $907,000.

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990					$13,500
	Sequester applied, 1990					(169)
	Appropriation currently available, 1990	Pos./BA			209	13,331
		FTE/Obl.			197	13,331
	FY 1991 Adjustments to base:					
GA-48	Adjustment for 1990 pay increase and related costs			355		
GA-48	Other cost changes			522		
	Subtotal, adjustments to base:					877
	1991 Base	Pos./BA			209	14,208
		FTE/Obl.			197	14,208

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
GA-53	Inspector General	Pos./BA	209	$14,008	209	$13,331	209	$14,208	214	$15,115	5	$907
		FTE/Obl.	196	13,970	197		197		202		5	
	TOTAL	Pos./BA	209	14,008	209	13,331	209	14,208	214	15,115	5	907
		FTE/Obl.	196	13,970	197		197		202		5	

Note: In FY 1989 funding for the Office of the Inspector General was provided through the "Salaries and expenses" appropriation; FY 1989 actuals are shown for comparison purposes only.

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Reimbursable Obligations	Pos./BA	0	$0	0		0		0		0	
	FTE/Obl.	0	$0	0	$330	0	$330	0	$330	0	0
TOTAL	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	0	0	330	0	330	0	330	0	0

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$0	$13,661	$14,538	$15,445	$907
Financing:					
Offsetting collections from:					
Federal funds		(330)	(330)	(330)	
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year					
Unobligated balance transferred					
Unobligated balance, end of year					
Unobligated balance lapsing					
Budget Authority	0	13,331	14,208	15,115	907
Financing from proposed transfers:					
Sequester		169			
Appropriation	0	13,500	14,208	15,115	907

Note: The Office of the Inspector General had no separate appropriation in FY 1989; however, a comparable amount in the budget authority was $14,008 in FY 1989.

Department of Commerce
General Administration
Office of the Inspector General
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Estimated Cost Changes:		
Personnel compensation		
Full-time permanent		507
Other than full-time permanent		2
Total, Personnel compensation	0	509
Civilian personnel benefits		265
Rental payments to GSA		46
Communications, utilities and miscellaneous charges		(37)
Other services		91
Supplies and materials		3
Total	0	877

Department of Commerce
General Administration
Office of the Inspector General
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

Object Class			FTE	Amount
11. and 12. Personnel Compensation and Benefits:				
Adjustment for 1990 pay increase and related costs				+355
Total cost in 1990 of pay increase		+$265,000		
Less amount absorbed		(265,000)		
Anticipated 1990 pay increase supplemental		0		
Amount in 1991 to provide full-year cost of pay increase		+355,000		
Less amount absorbed in 1991		0		
Subtotal, adjustment for 1990 pay raise		+$355,000		

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, GA, OIG is absorbing the full cost of this pay increase.

			FTE	Amount
Adjustment for 1991 pay increase and related costs				+173
Total cost in 1991 of general pay increase	+$252,000			
Less amount absorbed	(126,000)			
Subtotal, adjustment for 1991 general pay increase		+$126,000		
Total cost in 1991 of SES pay increase	94,000			
Less amount absorbed	-47,000			
Subtotal, adjustment for 1991 SES increase		+47,000		
Total adjustment for 1991 pay increases		+$173,000		

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

	FTE	Amount
Compensable days		+35
Civil Service Retirement System (CSRS)		(21)
Federal Employees' Retirement System (FERS)		+40
Thrift plan		+6

Compensable days . . . . +35

The cost of one more compensable day in FY 1991 is calculated by dividing the FY 1990 estimate for personnel compensation and benefits by the number of compensable days, 260, for an increase of $35,100.(($8,183,000 + 943,000) / 260)

Civil Service Retirement System (CSRS) . . . . (21)

The number of employees covered by CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by CSRS will drop from 76.90 percent in 1990 to 73.20 percent in 1991. This will result in a decrease of 3.70 percent in the cost of CSRS contributions, for a decrease of $21,194. ($8,183,000 x .07 x .037)

Federal Employees' Retirement System (FERS). . . . . +40

The number of employees covered by FERS will continue to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 23.1 percent in 1990 to 26.8 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.0 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($8,183,000)	
Basic benefit cost in 1990 ($8,183,000 x .231 x .1297)	$245,168
Basic benefit cost in 1991 ($8,183,000 x .268 x .13)	285,096
Increase in basic benefit contributions (1991 - 1990)	+$39,928

Thrift plan. . . . . +6

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of employees covered by FERS will increase by 3.7 percent, from 23.1 percent in 1990 to 26.8 percent in 1991. We estimate the agency contribution for switchers will be 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Total Thrift Savings Plan increase ($8,183,000 x .037 x .02)	+$6,055

	FTE	Amount
Federal Insurance Contributions Act (FICA)		+22

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in 1991 from $50,025 in 1990, therefore, the percentage of salary subject to FICA will increase from 91.27 percent in 1990 to 93.19 percent in 1991. The OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in 1991. This will result in an increase of $20,353 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 ($8,183,000 x .231 x .9127)	$1,725,252	
FERS OASDI tax in 1990 ($1,725,252 x .0617)		$106,448
FERS payroll subject to FICA tax in 1991 ($8,183,000 x .268 x .9319)	2,043,698	
FERS OASDI tax in 1991 ($2,043,698 x .0620)		126,709
Increase (1991 - 1990)		+$20,261
Other payroll not covered by retirement systems ($63,000)		
Other payroll subject to FICA tax in 1990 ($63,000 x .9127)	$57,500	
OASDI tax in 1990 ($57,500 x .0617)		$3,548
Other payroll subject to FICA tax in 1991 ($63,000 x .9319)	58,710	
OASDI tax in 1991 ($58,710 x .0620)		3,640
Increase (1991 - 1990)		92
Total OASDI increase		+$20,353

Medicare:

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 91.27 percent in 1990 to 93.19 percent in 1991 as the maximum salary subject to FICA tax increases. The cost of medicare will increase as follows:

Total payroll ($8,303,000)		
Total payroll subject to FICA in 1990 ($8,288,000 x .9127)	$7,564,458	
Total payroll subject to FICA in 1991 ($8,288,000 x .9319)	7,723,587	
Increase in payroll subject to FICA (1991 - 1990)	+159,129	
Increase in Medicare tax ($159,129 x .0145)		+$2,307

	FTE	Amount
Health insurance According to the Office of Personnel Management, the government's contribution for health insurance premiums has increased by an average of 28% in FY 1990. Applied against a base of $377,000, the increase is $105,560.		+106
Employees Compensation For the first time, Inspector General is being billed by the Office of Workers Compensation programs in the amount of $58,332. Therefore, the adjustment to base is the full amount rounded to $58,000.		+58
Total, Personnel compensation and benefits	0	+774
23.1 Rental payments to GSA. The GSA estimates a 4.4 percent increase for the 1991 rent payment. Applied against a base of $1,035,000 the increase is $45,540.		+46
23.3 Communications, Utilities and Miscellaneous Charges		
Federal Telecommunications System - 2000 Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.		(37)
25. Other Services		
Working Capital Fund charges The General Administration's Working Capital Fund charges necessary to maintain the current level of operations has increased by $91,000 over a base of $877,000.		+91
26. Supplies and materials. The increase in supplies and materials is based on the 1991 GNP deflator of 4.2 percent. Applied against a base of $67,000 the increase is $2,814.		+3
Total FY 1991 Adjustments to Base and Built-in-Changes	0	+877

Appropriation Language and Code Citations:

Appropriation: Office of the Inspector General

1. For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, as amended, $15,115,000.

5 U.S.C. App.3, as amended by P.L.100-504

Section 2 of the Inspector General Act of 1978 (5 U.S.C. App.3), as amended, provides that "in order to create independent and objective units - (1) to conduct and supervise audits and investigations relating to programs and operations of the establishments listed in section 11(2)...there is hereby established in each of such establishments an office of Inspector General." Section 11(2) of the Act reads, "the term `establishment' means the Department of... Commerce..."

31 U.S.C sec. 1105, as amended by P.L.100-504

The Inspector General Act Amendments of 1989 (P.L.100-504) amended 31 U.S.C. sec. 1105(a). As amended, this section provides that "the President shall include in each budget the following... a separate appropriation account for appropriations for each Office of Inspector General of an establishment defined under section 11(2) of the Inspector General Act of 1978."

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity											
Executive Direction	Pos./BA	13	$504	13	$955	13	$1,024	13	$1,024	0	$0
	FTE/Obl.	13	980	13		13		13		0	
Inspections & Resource Management	Pos./BA	25	1,519	28	1,843	28	1,951	33	2,341	5	390
	FTE/Obl.	23	1,689	24		24		28		4	
Audits	Pos./BA	130	9,324	130	8,171	130	8,698	130	9,215	0	517
	FTE/Obl.	122	8,677	122		122		123		1	
Investigations	Pos./BA	41	2,661	38	2,362	38	2,535	38	2,535	0	0
	FTE/Obl.	38	2,624	38		38		38			
Total	Pos./BA	209	14,008	209	13,331	209	14,208	214	15,115	5	907
	FTE/Obl.	196	13,970	197		197		202		5	

Department of Commerce
General Administration
Office of the Inspector General
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Goals and Objectives

GOALS:

- Prevent and detect fraud, waste, and abuse in Commerce programs and operations, both internal and external.
- Promote economy and efficiency in Commerce operations.

OBJECTIVES:

- Concentrate on those programs and operations which have the greatest potential for: identifying fraud; recovering funds precluding unnecessary outlays; and improving management.
- Improve the value of the Inspector General's findings and recommendations to senior Department management.
- Enhance the Inspector General's ability to review areas of high technology, especially ADP.
- Establish a minimal deterrence presence in all external operations of the Department.
- Increase oversight of Federal Management Financial Integrity Act related weaknesses.

Base Program FY 1991

The Office of Inspector General (OIG) was established in FY 1979 in accordance with the Inspector General Act of 1978. The OIG provides an independent voice to the Secretary and other senior Commerce managers in matters relating to fraud, waste, abuse and mismanagement. The Office has the authority to inquire into all program and administrative activities of the Department, including those individuals or organizations performing under grants, contracts or loans.

The work is conducted through audits (management and financial), investigations and inspections. The findings of the audits and inspections are presented to the pertinent operating officials and agency heads, who are given an opportunity to review and comment upon the reports before they are released in final form. Investigations are referred to the U.S. Department of Justice for prosecution where evidence of criminal wrongdoing is uncovered or if civil recoveries are possible. Investigative findings may also be referred to the appropriate agency official for administrative redress.

The Office of Inspector General is headquartered in Washington, D.C., and maintains six regional offices. The Office of Audits has organizations in Atlanta, Denver, and Seattle. The Office of Investigations has organizations in Atlanta, Boulder and Newark. As proposed for FY 1991, the OIG will be funded at 214 permanent employees, 65 of whom will be located in the field.

The mission of the OIG is accomplished through the following activities:

Executive Direction	includes the immediate office of the Inspector General and the Office of Counsel; provides overall leadership and policy direction, including reviews of proposed and existing Departmental legislation and regulations; and provides legal assistance for auditors, investigators and inspectors.
Inspections and Resource Management	performs inspections of Departmental organizations; develops and evaluates the policies and procedures of the OIG; and evaluates OIG internal operations; and provides personnel, budget and other administrative support services.

The inspections program within the Office of Inspections and Resource Management was created to expand the coverage of the OIG in the Department of Commerce. Before the program was established in 1982, the OIG had an audit cycle of over 35 years, and over 97 percent of the Department had never been visited by OIG.

Inspections are brief reviews of Commerce units in the field and Headquarters, or of a firm or organization which receives funds from the Department. They are intended to (a) gather current information about programmatic and administrative problems while there is still time to correct them, and (b) to highlight for Department managers those activities which are being performed well. The inspection team (usually three persons with audit, investigation and/or management analysis background) provides immediate debriefings to agency management upon its return from a visit, and a written report is issued shortly thereafter. Significant problems identified during an inspection are brought to agency managers or referred to OIG auditors or investigators for follow-up.

An inspection differs from an audit in terms of timelines, depth of inquiry, and procedures which govern its performance. Because of the freshness of the inspection and findings, they have been positively received by Commerce management. Since late in FY 1982, when the inspections program started, the OIG has made over 175 inspections.

Audits	performs management audits of Commerce programs, operations and significant procurements; performs financial and compliance audits of DOC contracts, grants, cooperative agreements, loans, and loan guarantees; performs audits of the Department's major computer system development efforts and established ADP systems; and arranges for pre-award audits of contracts receiving Commerce funds.

The Office of Audits conducts reviews of varying scope both of internal Department programs and operations (management audits) and of external activities funded by or through the Department; specifically contracts, grants, cooperative agreements, loans, and loan guarantees (external audits).

A management audit can be one or more of the following: (1) a financial and compliance audit, to determine compliance with laws, regulations and sound accounting procedures; (2) an efficiency and economy audit, to determine whether resources are being managed efficiently and economically and whether adequate internal controls are in place; and/or (3) a program results audit, to determine whether the desired benefits of a program are being achieved. This type of audit concentrates on the delivery of services, program results, legislative effectiveness, cost effectiveness, and vulnerabilities. Given the broad scope of such an effort, management audits require significant commitments of time and personnel.

External audits are designed to determine one or more of the following: (1) adequacy of accounting procedures and internal controls; (2) allowability of costs; (3) compliance with laws, regulations, and the terms and conditions of the award; and/or (4) whether the project achieved the desired results or reflected the performance level required (i.e., did the taxpayers get what they paid for?).

In accordance with the Single Audit Act and OMB Circular A-128, the Office also is responsible for reviews of organization-wide audits of state and local governments which receive Commerce funds.

Studies performed by the President's Council on Integrity and Efficiency indicate that most fraud is not committed within the Government, but is perpetrated against it from the outside. Recognizing this, the Office of Audits pioneered a program which provides for OIG review of recipients of large amounts of financial assistance before the award funds have been disbursed. The methodology was developed and tested in the audit of the Department's public works programs, where millions of dollars already have been identified as "up-front" savings. This technique has been extended to other Department grant programs and was the basis for beginning a program of loan audits.

The Department is developing numerous major information systems with total life-cycle costs of $3 billion. The OIG's Office of Audits (OA) encourages Commerce agencies to analyze the costs, benefits and risks associated with alternatives for satisfying the automation requirement; and improve demonstration testing to show that systems will deliver desired benefits before full system production and delivery. These audits analyze if Commerce systems will be delivered on time, at reasonable cost, and will work. OA provides independent reviews of Department of Commerce ADP security programs through evaluation and testing of Departmental computer sites and systems. OA tests electronic and physical access controls in established Commerce ADP security regulations. Also, OA reviews Commerce ADP development efforts for compliance with ADP security regulations.

In the major procurement area, OA encourages Commerce agencies to use pre-award audit and evaluation information in negotiating contracts for significant systems. By using more audit and evaluation information, Commerce agencies will receive the best prices in major negotiated procurements. OAIS conducts compliance reviews of Commerce contracting offices to ensure that the necessary pre-award audits are being requested. The compliance reviews have increased the number and effectiveness of pre-award contract audits in the Department. Pre-award audits have historically resulted in cost avoidance of eight to fifteen percent of contract costs.

OA arranges for the Defense Contract Audit Agency (DCAA) to conduct pre-award and interim cost incurred audits. The cost incurred audits determine if the Department gets what it pays for. In arranging for the pre-award audits, OA (1) sees that sufficient documentation has been submitted to support requests for audits and returns inadequate requests, (2) incorporates technical evaluations of cost in the audit reports when not provided by Commerce agencies, (3) meets with DCAA auditors to become knowledgeable about complex audit findings, (4) reviews and forwards audit reports to auditees and returns audit reports for additional work, and (5) attends negotiation conferences to provide audit support to Commerce contracting officers.

Finally, OA conducts audits of significant Commerce procurements to determine if Department contracting activities comply with the Federal Acquisition Regulations, Federal Information Resources Management Regulations, etc.

Investigations conducts investigations of alleged or suspected criminal wrongdoing by Commerce employees, grantees, contractors and loan recipients. The mission of the Office of Investigations is to prevent and detect fraud involving Commerce funds, and abuse by Departmental employees, contractors, and recipients of financial assistance.

The OIG, therefore, concentrates its criminal investigative effort on those Commerce programs which fund external activities, where the potential for fraud is greatest or where early detection can prevent major problems from occurring later.

The Office of Investigations continues to support the Department's Office of Finance and Federal Assistance by conducting name checks on individuals and credit checks on businesses before award of a Commerce grant or loan.

As a general rule, the Office of Investigations does not handle cases involving personnel abuses or other administrative matters. Instead, the OIG refers them to the appropriate Commerce agency for action. The OIG will monitor the case through to its disposition and provide technical assistance to the agencies on how to conduct their reviews. Exceptions are made when the alleged infraction involves a senior Department official, or if the alleged conduct is criminal or otherwise appears egregious. Where it is practicable to do so, the OIG advises complainants of the disposition of the matter referred to it.

Return on Investment

The OIG is a level-of-effort activity with a direct correlation between staffing and the return on investment. In the past four and a half years, there have been 329 convictions, indictments and administrative sanctions. OIG recommendations have resulted in management commitments to recover or more efficiently use $584 million, at a total cost in OIG budgets of $58.9 million. This is a benefit-to-cost ratio of nearly ten to one. This does not include the nonfinancial yield of investigations, inspections and audits.

The quantified FY 1989 - FY 1991 results and projections of OIG operations are:

(Dollar amounts in thousands)

	1989 Actual	1990 Projected	1991 Proposed
Number of Management audits	30	28	28
Number of Contract, grant and loan audits issued	90	100	100
Number of C/G/L audits processed	797	840	840
Number of ADP audits	16	20	20
Number of Inspections	30	35	50
Number of Investigations	125	220	220
Management commitments:			
To more efficiently use funds	$131,394	...	...
Investigative Recoveries	$ 538	...	...
Total Savings	...	...	...
Indictments/Convictions	17/15	...	...
Administrative sanctions	70	...	...

Department of Commerce
General Administration
Office of the Inspector General
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Office of Inspections and Resource Management.	Pos./BA	28	$1,951	33	$2,341	5	$390
	FTE/Obl.	24		28		4	

Expansion of inspections of U.S. and Foreign Commercial Services (U.S. and FCS) field operations (4 FTE, +$390,000)

The Commerce Office of Inspector General is responsible for conducting audits, investigations, and inspections of the various departmental operations, including those within the U.S. and Foreign Commercial Service. However, because staff is limited, the office has been unable to devote the resources that would be necessary to perform inspections of U.S. and FCS field operations throughout the U.S. and in 65 foreign countries on a five-year cycle, as was originally envisioned by the Congress. Any attempt to do so under the present conditions would significantly hinder efforts in other areas of the Department and cripple other important OIG initiatives.

With existing staff, the office has been able to provide resources to conduct the equivalent of six reviews each year of U.S. and FCS field offices, whereas about 24 offices need to be inspected each year to meet the five-year cycle. Considering the problems that have been identified at U.S. and FCS field offices in reviews by the General Accounting Office, the Office of Inspector General, and others, it is increasingly apparent that each of these offices should receive regular inspections. This conclusion is further supported by the Omnibus Trade Bill of 1989 recently passed by the Congress which calls for regular reviews of U.S. and FCS operations by the Commerce Inspector General. With the addition of five positions dedicated to U.S. and FCS inspections, the office will conduct 24 inspections each year, thus achieving a five-year cycle for the field offices. This would include inspections of eight domestic offices and 16 foreign country posts each year.

	1991	1992	1993	1994	1995
Direct Obligations	390	390	390	390	390
Budget Authority	390	390	390	390	390
Outlays	374	385	390	390	390
FTE	4	4	4	4	4

Exhibit 12

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL

Subactivity: INSPECTIONS AND RESOURCE MANAGEMENT

Program Change: INSPECTIONS OF U.S. AND FOREIGN COMMERCIAL SERVICES (FCS) FIELD OPERATIONS

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	171
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	171
12.1	Civilian personnel benefits	43
21	Travel and transportation of persons	113
22	Transportation of things	0
23.1	Rental payments to GSA	19
23.3	Communications, utilities and miscellaneous charges	2
24	Printing and reproduction	5
25	Other services	25
26	Supplies and materials	8
31	Equipment	4
99	Direct obligations	390

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: INSPECTIONS AND RESOURCE MANAGEMENT
Program Change: INSPECTIONS OF U.S. AND FOREIGN COMMERCIAL SERVICES (FCS) FIELD OPERATIONS

Title:	Grade	Number	Annual Salary	Total Salaries
INSPECTOR	14	1	52,104	52,104
INSPECTOR	13	4	44,092	176,368
Total		5		228,472
Less lapse (25%)		(1)		(57,118)
Total full-time permanent		4		171,354

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	4
Other than full-time permanent	
Total	4
Authorized Positions:	
Full-time permanent	5
Other than full-time permanent	
Total	5

Department of Commerce
General Administration
Office of the Inspector General
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Office of Audits	Pos./BA	131	$8,698	131	$9,215	0	$517
	FTE/Obl.	122		123		1	

Provide technical assistance capability for program and system audits (1 FTE, +$517,000) - This request will assist the OIG in its audits and inspections of the sophisticated automated systems as well as scientific and economic activities which require technical expertise not currently available on the staff.

The Department of Commerce is one of the most diversified civilian departments; for example, Commerce satellites probe the earth's atmosphere, its ships map the ocean floor, and its planes plot the course of hurricanes. In addition, other Commerce agencies make direct and guaranteed loans, count the U.S. population, recommend telecommunications policy, finance public radio and television facilities, and regularly assess and report on the status of the Nation's economy. By law, the OIG is charged to review this diverse array of programs and reach judgments on how efficiently and effectively the work is carried out. To do this, the OIG conducts audits and inspections of department organizations and activities.

Specific audits planned for 1990-1991 include:

- NOAA Corps Staff Utilization
- NOAA Ship Upgrade and Replacement
- National Weather Service Modernization
- Polar Orbiting Satellite Alternatives
- LANDSAT Commercialization
- Patent and Trademark Staff Utilization, Overtime, and Union Relationships
- Gross National Product Process
- 1990 Census

Audits and inspections performed by in-house staff are conducted on organizations and programs ranging from applied science, weather forecasting, loan administration, engineering, and business administration. However, as the OIG has begun to tackle the more sophisticated automated systems as well as the scientific and economic activities, concentrating on utilization of staff and equipment, technical capabilities beyond those of our in-house staff are needed. Individuals are required with analytical abilities in areas as diverse as: management science; computer science; economics; and industrial, system and software engineering.

Since these needs for technical assistance are so varied and generally for limited periods of time, it would be advantageous to obtain this assistance through contacts and temporary employees rather than full time employees with all of the attendant costs. The Inspector General Act of 1978 authorizes the Inspector General to obtain such temporary technical assistance as needed to carry out the requirements of the Act.

	1991	1992	1993	1994	1995
Direct Obligations	517	517	517	517	517
Budget Authority	517	517	517	517	517
Outlays.	495	509	517	517	517
FTE.	1	1	1	1	1

Exhibit 12

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: OFFICE OF AUDITS
Program Change: TECHNICAL ASSISTANCE

Object Class	1991 Increase
11 Personnel compensation	
11.1 Full-time permanent	0
11.3 Other than full-time permanent	52
11.5 Other personnel compensation	0
11.9 Total personnel compensation	52
12.1 Civilian personnel benefits	4
21 Travel and transportation of persons	10
22 Transportation of things	0
23.1 Rental payments to GSA	4
23.3 Communications, utilities and miscellaneous charges	3
24 Printing and reproduction	5
25 Other services	424
26 Supplies and materials	5
31 Equipment	10
99 Direct obligations	517

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: OFFICE OF AUDITS
Program Change: TECHNICAL ASSISTANCE

Title:	Grade	Number	Annual Salary	Total Salaries
Specialist (4 Part-time temporary)	14	1	52,104	52,104
Total		1		52,104
Less lapse (0%)		0		0
Total full-time permanent		1		52,104

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	0
Other than full-time permanent	1
Total	1
Authorized Positions:	
Full-time permanent	0
Other than full-time permanent	
Total	0

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Reimbursable Program

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity: Reimbursable Program	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	$0	0	$330	0	$330	0	$330	0	0
TOTAL	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	0	0	330	0	330	0	330	0	0

Goals and Objectives

GOALS: To provide a centralized source of funding for special tasks and functions of a non-permanent nature.

OBJECTIVES: To facilitate charging individual bureaus for certain "outside audits" conducted by other agencies.

Base Program FY 1990

Activities in the program include such functions as: outside audits and award payments to employees who disclose fraud, waste, and mismanagement.

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	8,816	8,987	171
11.3	Other than full-time permanent	19	71	52
11.5	Other personnel compensation	120	120	0
11.9	Total personnel compensation	8,955	9,178	223
12.1	Civilian personnel Benefits	1,607	1,654	47
21	Travel and transportation of persons	757	880	123
22	Transportation of things	4	4	0
23.1	Rental payments to GSA	1,073	1,096	23
23.3	Commun., util., misc. charges	245	253	8
24	Printing and reproduction	26	33	7
25	Other services	1,407	1,856	449
26	Supplies and materials	65	78	13
31	Equipment	69	83	14
99	Total, Direct Obligations	14,208	15,115	907
	Reimbursable Obligations	330	330	0
	TOTAL OBLIGATIONS	14,538	15,445	907

Department of Commerce
General Administration
Office of the Inspector General

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-Time Equivalent Employment:			
Full-time permanent	196	200	4
Other than full-time permanent	1	2	1
Subtotal, Direct	197	202	5
Reimbursable	0	0	0
Total	197	202	5
Authorized Positions:			
Full-time permanent	208	213	5
Other than full-time permanent	1	1	0
Subtotal, Direct	209	214	5
Reimbursable	0	0	0
Total	209	214	5

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level	$87	$87	$0
Senior executive service	490	490	0
General schedule	8,239	8,410	171
Subtotal	8,816	8,987	171
11.3 Other than full-time permanent			
General schedule	19	71	52
Subtotal	19	71	52
11.5 Other personnel compensation			
Overtime	7	7	0
SES performance awards	15	15	0
Cash awards	26	26	0
PMRS awards	72	72	0
Other	0	0	0
Subtotal	120	120	0
11.9 Total personnel compensation	8,955	9,178	223

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	Civilian personnel benefits			
	Civil service retirement	367	382	15
	Federal employees' retirement	419	436	17
	Thrift savings plan	75	78	3
	Federal insurance contribution act	185	190	5
	Health insurance	478	483	5
	Life insurance	25	27	2
	Employees' compensation fund	58	58	0
	Other	0	0	0
	Subtotal	1,607	1,654	47
21	Travel and transportation of persons			
	Common carrier	327	376	49
	Mileage	18	22	4
	Per diem/actual	376	443	67
	Vehicular	32	34	2
	Other	4	5	1
	Subtotal	757	880	123
22	Transportation of things	4	4	0
23.1	Rental payments to GSA	1,073	1,096	23

Department of Commerce
General Administration
Office of the Inspector General

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
23.3	Communications, utilities and miscellaneous charges	0	0	0
	Rental of ADP equipment	1	1	0
	Rental of office copying equipment	1	1	0
	Other equipment rental	6	6	0
	Federal telecommunications system	66	72	6
	Other telecommunications services	128	128	0
	Postal Service by USPS	42	44	2
	Other	1	1	0
	Subtotal	245	253	8
24	Printing and reproduction			
	Publications	15	15	0
	Other	11	18	7
	Subtotal	26	33	7
25	Other services			
	Training:			
	University	1	1	0
	Office of personnel management	2	2	0
	Other	57	57	0
	Maintenance of equipment	40	40	0
	GSA reimbursable services	50	50	0
	ADP services	2	2	0
	Telecommunications services	3	3	0
	Payments to GA, WCF	999	999	0
	Other Federal Agencies	228	228	0
	Other	25	474	449
	Subtotal	1,407	1,856	449

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
26	Supplies and materials			
	Office supplies	47	60	13
	ADP supplies	5	5	0
	Other	13	13	0
	Subtotal	65	78	13
31	Equipment			
	Office machines and equipment	32	46	14
	ADP hardware	25	25	0
	ADP software	5	5	0
	Other	7	7	0
	Subtotal	69	83	14
99	Subtotal, Direct Obligations	14,208	15,115	907
	Reimbursable Obligations	330	330	0
	TOTAL OBLIGATIONS	$14,538	$15,445	$907

Department of Commerce
General Administration
Working Capital Fund
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

		Personnel	Amount	Personnel	Amount
Summary of adjustments to base:					
FY 1990 Congressional Estimate	Pos./BA			760	$ 0
	FTE/Obl.			741	55,147
FY 1991 Adjustments to base:					
Transfers		1	$ 85		
Other cost changes		0	3,984		
Subtotal, adjustments to base:				1	4,069
1991 Base	Pos./BA			761	0
	FTE/Obl.			742	59,216

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Departmental Staff Services	Pos./BA	575	$ 0	599	$ 0	600	$ 0	600	$ 0	0	$ 0
	FTE/Obl.	551	50,290	584	49,180	585	52,800	585	52,998	0	198
General Counsel	Pos./BA	137	0	139	0	139	0	148	0	9	0
	FTE/Obl.	138	10,896	136	10,193	136	10,549	145	11,278	9	729
Public Affairs	Pos./BA	22	0	22	0	22	0	22	0	0	0
	FTE/Obl.	20	1,573	21	1,678	21	1,771	21	1,771	0	0
Subtotal	Pos./BA	734	0	760	0	761	0	770	0	9	0
	FTE/Obl.	709	62,759	741	61,051	742	65,120	751	66,047	9	927
Less Intra-Fund Transfers			(6,000)		(5,904)		(5,904)		(5,904)		
Total Requirements			56,759		55,147		59,216		60,143		

Goals and Objectives

Goals: To provide necessary services to the clients in the most efficient and economical way possible consistent with Governmentwide and Commerce policy.

Objectives:

Director for Personnel and Civil Rights	To coordinate Departmentwide personnel data systems; to manage integration of personnel and payroll systems operations; to coordinate management training; to manage the Unemployment Compensation program; to manage personnel and payroll operations for selected Commerce organizations including recruitment and staffing services; to operate safety and employee occupational health programs and to oversee discrimination complaint investigations.
Director for Finance and Federal Assistance	To carry out all budget functions for the Office of the Secretary including management of the Working Capital Fund. To provide financial assistance administrative support services, ensuring that financial assistance actions comply with all applicable regulations and procedures, and to maintain system support of financial assistance administrative functions. To enhance the efficiency of administrative payment services and systems thereby reducing operating and support costs.
Director for Procurement and Administrative Services	To implement the Federal work space reduction programs within DOC; implement policies and procedures for programs of physical, information and personnel security and study recommendations for consolidating DOC printing and publishing activities, transportation services, directory and distribution functions, and warehousing. Continue improvement of conditions at HCHB for all tenant organizations. Continue implementation of the Small Purchase System, Commerce Procurement Data System, Automated Procurement Data System, CONTRACK, Security Management Information System, Real Estate and Space Management Information Systems (RSMIS), and the Personal Property System as they relate to HCHB. Implement and coordinate DOC-wide building management responsibilities.
Director for Management and Information Systems	To provide operational computer support to Office of the Secretary components and designated Commerce bureaus and programs including the Export Control Automated Support System, Departmentwide administrative systems initiatives, Minority Business Development Centers and technical information order processing systems. To upgrade and integrate Departmental Administrative Systems such as the Financial and Management Information System, Administrative Payments, and Real and Personnel Property and Procurement.
Administrative Law Judge	To conduct legal hearings and adjudication functions Departmentwide and to implement hearing and office automation procedures.

General Counsel	To provide legal advice, guidance and services on matters involving all Departmental programs and components. To supervise the development of the Department's legislative program and to continue to improve on the delivery of effective legal services for the growing needs of major programs.
Public Affairs	To promote public understanding and support of DOC programs, services and consumer issues. To ensure continuity and cost-effective management of DOC public affairs programs. To act as the primary point of contact on DOC issues for the White House and Federal departments and agencies.

Base Program

Director for Personnel and Civil Rights	Provides for the development and monitoring of Departmentwide personnel data systems and procedures; provides personnel operations for selected operating systems; provides selected recruitment and staffing services; provides safety and employee occupational health program direction; provides management and operation of the Unemployment Compensation program, conducts the management Training Center; and conducts discrimination complaint investigations and adjudication.
Director for Finance and Federal Assistance	Provides all budget functions for the Office of the Secretary. Provides controllership functions for the Working Capital Fund and financial support and guidance Departmentwide on matters concerning the Working Capital Fund. Performs financial assistance administrative duties and responsibilities to ensure that financial assistance actions comply with Departmental procedures. Provides accounting, administrative payment and travel accounting and payment services for the Office of the Secretary and other assigned organizational units, and operates the Management Service Center.
Director for Procurement and Administrative Services	Provides timely, effective building management, security services, library information services, publications services and conducts procurement operations for the Department.
Director for Management and Information Systems	Implements the Departmentwide systems for supporting administrative functions.
Administrative Law Judge	Provides hearings and adjudication functions Departmentwide.
General Counsel	Provides substantive legal advice, guidance and services on matters involving all components and programs of the Department.
Public Affairs	Provides support to the Secretary and the bureaus to improve the effectiveness of Commerce communications with other government agencies, the private sector, and the public.

General Administration
Working Capital Fund

ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Direct Obligations in thousands)

	Personnel	Amount
Adjustments:		
Transfer from "Salaries and expenses", Bureau of Export Administration	2	100
Transfer to "Salaries and Expenses", United States Travel and Tourism Administration	(1)	(15)
Subtotal, Transfers	1	85
Other cost changes:		
Adjustment for 1990 Pay Raise	0	1,022
Adjustment for 1991 Pay Raise	0	366
Federal Employees' Retirement System	0	115
Federal Insurance Contribution act (FICA)	0	58
Civil Service Retirement System	0	(53)
One More Compensable Day	0	108
Paper Stock Program	0	1,668
Operations and Maintenance Support Systems	0	200
Management Service Center	0	500
Total Adjustments to Base and Built-in Changes	0	3,984

General Administration
Working Capital Fund

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Dollar amounts in thousands)

	Personnel	Amount	Personnel	Amount
FY 1990 Congressional Estimate			741	$55,147
Adjustments to base and built-in changes:				
Transfers:				
From "Salaries and expenses", Bureau of Export Administration. For direct operational personnel services, 2 FTE's are transferred from the Bureau of Export Administration to the Office of Personnel and Civil Rights in the General Administration's "Working Capital Fund" account. The Working Capital Fund billings will reflect the increased cost of $100,000.	2	$100		
To "Salaries and Expenses", United States Travel and Tourism Administration For reduction of personnel services for overseas USTTA staff, 1 FTE is transferred from the "Working Capital Fund" General Administration to "Operations and Administration", International Trade Administration (ITA). The Working Capital Fund billings will reflect the decreased cost $15,000 to the United STates Travel and Tourism Administration. The ITA will provide personnel services for overseas USTTA staff.	(1)	(15)		
Subtotal Transfers			1	85

		FTE	Amount	FTE	Amount
Adjustment for 1990 pay increase and related costs					
Total cost in 1990 of pay increase	752,056				
Less amount absorbed	-752,056				
Anticipated FY 1990 pay increase supplemental	0				
Amount in FY 1991 to provide full-year cost of pay increase	1,022,095				
Less amount absorbed	0				
Subtotal, adjustment for 1990 pay increase		...	+1,022		

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, the Working Capital Fund is absorbing the full cost of this pay increase.

		FTE	Amount	FTE	Amount
Adjustment for 1991 pay increase and related costs					
Total cost in 1991 of general pay increase	731,672				
Less amount absorbed	-365,836				
Adjustment for January, 1991 pay increase	365,836				
Subtotal, adjustment for 1991 pay increase		...	+366		

The President's budget includes an estimated general pay raise of 3.5 percent effective January 1, 1991. One-half of the 1991 costs of this increase will be absorbed.

Federal Employees' Retirement System:

The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by FERS. We estimate the percentage of payroll of eligible employees covered by FERS will rise from 25.20 percent in 1990 to 28.20 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.00 percent. The calculations for increased costs for basic benefits are:

		FTE	Amount	FTE	Amount
Payroll subject to retirement systems	$25,195,000				
Basic benefit cost in 1990 ($25,195,000 x .252 x .1297)	823,483				
Basic benefit cost in 1991 ($25,195,000 x .282 x .1300)	923,649				
Increase in basic benefit contributions (1991-1990)	100,166				

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of employees covered by FERS will increase by 3.00 percentage points, from 25.20 percent in 1990 to 28.20 percent in 1990. We estimate the agency contributions will be 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

		FTE	Amount	FTE	Amount
Total Thrift Savings Plan Increase ($25,195,000 x .0300 x .02)	15,117				
	115,283				
Adjustment to base for FERS for FY 1991		...	+115		

Federal Insurance Contributions Act (FICA):

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in FY 1991 from $50,025 in FY 1990, therefore, the percentage of payroll subject to FICA will increase from 93.59 percent in FY 1990 to 95.05 percent in 1991. The OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in FY 1991. This will result in an increase of $52,691 as follows:

OASDI:

		FTE	Amount	FTE	Amount
FERS payroll subject to FICA tax in 1990	$25,195,000				
($25,195,000 x .2520 x .9359)	5,942,160				
FERS OASDI tax in 1990 ($5,942,160 x .0617)	366,631				
FERS payroll subject to FICA tax in 1991 ($25,195,000 x .2820 x .9505)	6,753,293				
FERS OASDI tax in 1991 ($6,753,293 x .0620)	418,704				
Increase (1991-1990)	52,073				
Other payroll not covered by retirement systems	$521,000				
Other payroll subject to FICA tax in 1990 ($521,000 x .9359)	487,604				
OASDI tax in 1990 ($487,604 x .0617)	30,085				
Other payroll subject to FICA tax in 1991 ($521,000 x .9505)	495,211				
OASDI tax in 1991 ($495,211 x .0620)	30,703				
Increase (1991 - 1990)	618				
Total OASDI increase	52,691				
Adjustments to Base for FICA for FY 1991		...	+53		

Medicare:

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 93.59 percent in 1990 to 95.05 percent in 1991. The cost of medicare will increase as follows:

		FTE	Amount	FTE	Amount
Total payroll	$25,716,000				
Total payroll subject to FICA in 1990 ($25,716,000 x .9359)	24,067,604				
Total payroll subject to FICA in 1991 ($25,716,000 x .9505)	24,443,058				
Increase in payroll subject to FICA (1991 - 1990)	375,454				
Increase in Medicare tax ($375,454 x .0145)	5,444				
Adjustment to Base for Medicare for FY 1991		...	+5		

Civil Service Retirement System:

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by retirement systems will drop from 74.8 percent for CSRS in 1990 to 71.80 percent in 1991. This will result in a decrease of $52,909 in the cost of CSRS contributions, from $1,319,210 to $1,266,301.

		FTE	Amount	FTE	Amount
FY 1990 CSRS basic benefits ($25,195,000 x .7480 x .07)	$1,319,210				
FY 1991 CSRS basic benefits ($25,195,000 x .7180 x .07)	1,266,301				
Decrease in CSRS basic benefits (1991-1990)	(52,909)				
Adjustment to Base for CSRS for FY 1991		0	(53)		

	FTE	Amount	FTE	Amount
One more compensable day.	...	+108		
The cost of one more compensable day in FY 1991 was calculated by dividing the FY 1990 estimate for personnel compensation and benefits by the number of compensable days, 260, for an increase of $107,865 (($25,716,000 + $2,329,000) / 260).				
Paper Stock Program	...	+1,668		
This change reflects the paper stock program estimates for FY 1991. Bureau orders for paper are centralized through the Working Capital Fund stock program.				
Operations and Maintenance Support Services	...	+200		
For facilities support and guard services for the HCHB not provided by the GSA Building Delegation Program, an increase of $200,000 is required. The GSA is continuing to phase out their support for guard service at HCHB, the $200,000 will be needed in FY 1991 to continue guard services at the current level.				
Management Service Center	...	+500		
For support of the Financial Accounting and Reporting System (FARS), an increase of $500,000 is required. This system contains more accounting records and uses additional screens for updating these records than the previous system and requires more computer on-line time to process the accounting entries.				
Subtotal, Adjustments to base for FY 1991			0	3,984

	Personnel	Amount	Personnel	Amount
Program changes:				
Personal Property System	...	+198		
For support of the Department's Personal Property System an increase of $198,000 is required. The Personal Property System will record and maintain information on all trackable personal property in each bureau in the Department through an Interagency Agreement with the Department of Agriculture's National Finance Center.				
Increase for Economic Development Administration	+4	+260		
For increased legal support requested by the Economic Development Administration in the area of Loan Portfolio litigation an increase of 4 FTE and $260,000 is required.				
Increase for International Trade Administration	+5	+349		
For increased legal support requested by ITA in the areas of Import Administration Office of Compliance (3 FTE, $195,000) and Trade Development (2 FTE, $154,000).				
Increase for United States Travel and Tourism Administration	...	+35		
For increased legal support arising from trade negotiations, the United States Travel and Tourism Administration is requesting an increase of $35,000.				
Office Automation	...	+85		
For support of General Counsel operations in providing upgraded office automation capabilities, an increase of $85,000 is required. In order to provide improved, timely and effective legal support to the bureaus within the Department, the Office of General Counsel will upgrade their office automation capabilities to be compatible with the Departmental computer network system.				
Subtotal, Program Changes			9	927
FY 1991 Congressional Submission			751	60,143

General Administration
Working Capital Fund
(Dollar amounts in thousands)

		FY 1989		FY 1990		FY 1991	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Departmental Staff Services	Pos./BA	575	$ 0	599	$ 0	600	$ 0
	FTE/Obl.	551	50,290	584	49,180	585	52,998
Director for Personnel and Civil Rights	Pos./BA	86	0	86	0	87	0
	FTE/Obl.	84	9,208	84	10,539	85	10,804
Director for Finance and Federal Assistance	Pos./BA	126	0	129	0	129	0
	FTE/Obl.	116	6,277	126	6,401	126	7,163
Director for Procurement and Administrative Services	Pos./BA	265	0	281	0	281	0
	FTE/Obl.	261	25,644	273	21,838	273	24,410
Director for Management and Information Systems	Pos./BA	92	0	97	0	97	0
	FTE/Obl.	85	8,759	95	9,996	95	10,201
Administrative Law Judge	Pos./BA	6	0	6	0	6	0
	FTE/Obl.	5	402	6	406	6	420
General Counsel	Pos./BA	137	0	139	0	148	0
	FTE/Obl.	138	10,896	136	10,193	145	11,278
Public Affairs	Pos./BA	22	0	22	0	22	0
	FTE/Obl.	20	1,573	21	1,678	21	1,771
Subtotal	Pos./BA	734	0	760	0	770	0
	FTE/Obl.	709	62,759	741	61,051	751	66,047
Less Intra-Fund Transfers	Pos./BA	0	0	0	0	0	0
	FTE/Obl.	0	(6,000)	0	(5,904)	0	(5,904)
Total Requirements	Pos./BA	734	0	760	0	770	0
	FTE/Obl.	709	56,759	741	55,147	751	60,143

General Administration
Working Capital Fund

Distribution by Bureau
(Dollar amounts in thousands)

	FY 1989	FY 1990	FY 1991
Office of the Secretary	$4,262	$4,277	$4,626
Office of the Inspector General	623	892	1,036
Bureau of the Census	6,661	5,641	6,151
Economic and Statistical Analysis	2,006	2,238	2,577
Economic Development Administration	1,925	2,174	2,589
International Trade Administration	9,535	9,743	10,652
Bureau of Export Administration	5,287	4,256	4,590
Minority Business Development Agency	1,861	1,987	2,144
U.S. Travel and Tourism Administration	540	668	734
National Oceanic and Atmospheric Administration	11,073	10,532	11,235
Patent and Trademark Office	3,051	2,975	3,323
Technology Administration	...	400	438
National Institute of Standards and Technology	2,330	2,337	2,451
National Technical Information Service	5,421	5,392	5,548
National Telecommunications and Information Administration	1,166	1,201	1,333
Other	1,018	434	716
Total	$56,759	$55,147	$60,143

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

AVERAGE GRADE AND SALARIES

	1989 Actual	1990 Estimate	1991 Estimate
Average ES Grade	3.84	4.12	4.12
Average GS/GM Grade	10.46	10.82	10.86
Average GS/GM Salary	$36,227	$37,580	$40,232

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

CONSULTING AND RELATED SERVICES
(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting Services	$ 79	$330	$505
Management and professional services	190	200	200
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total	$269	$530	$705

The Department of Commerce has established a comprehensive system for identifying and reviewing all proposed contracts and personnel appointments for consulting and advisory and assistance services. The Deputy Secretary is responsible for the overall control and approval of these services throughout the Department. The Associate Deputy Secretary has generally been assigned responsibility to oversee the ongoing operation of the system and to approve requests above the minimum dollar threshold of $25,000.

The Associate Deputy Secretary is assisted by a Review Panel consisting of key officials from the Office of the General Counsel, Procurement Management, Personnel and Civil Rights, Management and Information Systems, and Budget, Planning and Organization.

Within General Administration experts and consultants are hired on a temporary or intermittent basis to perform highly specialized services that cannot be performed by available personnel, such as:

- Providing advice and assistance to the Secretary and his Chief of Staff on the analysis of critical policy and legislative issues that concern the technology programs of the Department.
- Analyzing complex Federal policies affecting U.S. businesses to identify policies and procedures that inhibit private investment.
- Providing technical support to the Office of the Inspector General in it's audit and inspection of sophisticated automated sytems as well as scientific and economic activities.

Management and professional services are obtained under contract for specialized services requiring expertise not available in the Department. These services include:

- Providing professional accounting services for testing, validating and implementing a Departmental accounting system.
- Providing employee assistance counseling services for DOC employees in the Washington area.
- Developing an inventory of Commerce sites subject to Federal hazardous materials regulations.

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$1,420	$1,398	$1,384	$1,488
Pamphlets	27	15	12	12
Audiovisuals	0	0	0	0

Pamphlets

Pursuant to 15 U.S.C. 1519, the Secretary of Commerce must make a report in writing to Congress giving an account of all monies received and disbursed by the Department. He must also describe the work done by the Department in fostering, promoting and developing the foreign and domestic commerce, the mining, manufacturing and fishery industries of the U.S., and make such recommendations as he shall deem necessary for the effective performance of the duties and purposes of the Department. In addition to the description and accomplishments of the Department and its various units, this report includes a directory of key officials, and a summary of employment and financing for the past year.

OPENING STATEMENT

Mr. DWYER. Here to testify in support of this budget request is Thomas Collamore, the Assistant Secretary for Administration. Since this is your first appearance before this committee, we will insert your biographical sketch into the record at this point.

[The biography of Mr. Collamore follows:]

BIOGRAPHY OF THOMAS J. COLLAMORE, ASSISTANT SECRETARY FOR ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Thomas J. Collamore was nominated by President Bush as Assistant Secretary for Administration on April 12, 1989. He was confirmed by the United States Senate on May 17, 1989. Mr. Collamore serves as the Secretary's principal advisor on administrative matters in the Department.

He is the senior management official in an organization with more than 40,000 employees and an annual budget of over $2.7 billion. His responsibilities include budget, organization, personnel, administrative services, finance and accounting, grants management, information resources management, and program planning and evaluation. Mr. Collamore is a member of the President's Council on Management Improvement and serves as Chairman of the Council's Committee on Government Operations.

Mr. Collamore served on Vice President George Bush's senior staff from 1985 to 1989. From 1987 to January 1989, he was Assistant to the Vice President for Operations. He also served as liaision to the transition offices of the President-elect and Vice President-elect. From April 1985 to February 1987, Mr. Collamore was Deputy Assistant to the Vice President and Staff Secretary, where he created and managed a staffing system for all action items from the Vice President. Mr. Collamore accompanied Vice President Bush on trips to over twenty foreign countries and all fifty states. Mr. Collamore served from December 1982 to April 1985 as Special Assistant to Secretary of Commerce Malcolm Baldrige, where he was the Secretary's advisor on Cabinet Affairs and White House liaison.

In 1982, Mr. Collamore was Deputy Director for Operations in the Connecticut gubernatorial campaign of Lewis Rome. He served from 1981 to 1982 as a Confidential Assistant to the Secretary of Commerce. From June 1979 to March 1980, Mr. Collamore was a staff member for George Bush for President in Connecticut, and in 1978 he served as the personal aide to Mr. Rome during his candidacy for governor.

Mr. Collamore, a native of Hartford, Connecticut, graduated from Kingswood-Oxford School in West Hartford in 1977, where he delivered the Commencement address in 1989. In 1981, Mr. Collamore graduated magna cum laude with a Bachelor of Arts degree from Drew University in Madison, New Jersey. He resides in Washington, D.C.

Mr. DWYER. You may proceed with your statement at your own pace, sir.

Mr. COLLAMORE. Thank you, Mr. Chairman. Good morning, Mr. Early. I am pleased to be here to present the FY 1991 budget request for the General Administration's Salaries and Expenses appropriation. I have with me today Uriel Gottesman, the Director of the Office of Budget Operations for General Administration.

As you said, for Fiscal Year 1991, we are requesting $30.3 million and 356 positions, representing an increase of $2.5 million and eight positions over the Fiscal Year 1990 post-sequester appropriation. This increase includes $989,000 and eight positions for program increases, and $1.5 million in adjustments to base.

This budget supports the President's commitment to excellence in the Federal Government, through efforts to reinforce quality improvement initiatives and to strengthen management oversight within the Department. Commerce has traditionally supported the concept of management excellence—both within the Department and in the private sector.

We have taken action to ensure that the Department's programs and operations are of the highest quality possible. First, we have launched a reinvigoration of the Commerce Quality Improvement Program, calling upon the Commerce management team to dedicate themselves to the task.

Secondly, we have identified a couple of key areas where we need to strengthen management oversight. To do this requires the increase of $989,000 and eight positions. While we recognize that resources are scarce, we believe these areas promise sizable returns on investment, particularly in the case of major systems acquisition.

The FY 1991 Department of Commerce budget includes nearly $200 million for major system acquisitions, including such initiatives as modernizing the weather service, automating patent application and review, and upgrading Census mainframes.

Not only are considerable resources involved, but programs depend on these new automated systems to accomplish their mission. We have temporarily assigned three positions to oversee major systems acquisition, but we need an additional $772,000 and six more positions to ensure that we get the desired result without an unnecessary escalation in acquisition costs.

We also need to increase our investment in the Department's financial management systems. In recognition of this, I will soon establish a chief financial officer position in the Department to provide leadership and assume responsibility for improving bureau financial systems and for developing a single Department financial management system. To support the new CFO in these tasks, we are requesting one position and $117,000.

Commerce is also committed to achieving management excellence within existing resources. Our renewed quality improvement program focuses on the fact that productivity improvement must go hand-in-hand with high quality products and services.

Secretary Mosbacher strongly supports the importance of total quality management, and has established the Secretary of Commerce Annual Quality Award which will recognize Commerce organizations committed to quality. Bureau heads will develop formal quality programs and report back on their progress through the existing MBO process. Furthermore, a Departmental Quality Council, established by the Secretary and chaired by the Deputy Secretary, will coordinate and share Departmental quality initiatives.

Our last program increase also relates to management oversight. We are requesting an increase of $100,000 and one position for the Office of Space Commerce, which is responsible for coordinating commercial space activities in the Department.

This increase will improve efforts to provide industry with information on key business issues that affect private sector investment in space, such as finance, insurance, major industry trends, and foreign competition. Commercial space development offers opportunities for economic expansion in an area where U.S. technology remains dominant.

For adjustments to base, we need an additional $1.5 million to cover increases in employee benefit costs, rental payments to GSA, and other inflationary costs. This amount also provides for the cost of the 1990 pay raise and one half of the 1991 pay raise. The pay raises in 1988, 1989, and 1990 increased our costs by $1.5 million, but since FY 1988, appropriations after sequester have provided less than $200,000 to cover these as well as other inflationary costs.

As a result, we have reduced our staffing strength by leaving vacancies unfilled, but not without eroding our ability to provide executive direction and management support for Departmental programs. For this reason, we need our full request for adjustments to base.

This concludes my remarks. I would be happy to answer any questions you may have.

[The statement of Mr. Collamore follows:]

OPENING STATEMENT BY
THOMAS J. COLLAMORE
ASSISTANT SECRETARY FOR ADMINISTRATION
DEPARTMENT OF COMMERCE

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, AND STATE, THE JUDICIARY
AND RELATED AGENCIES
MARCH 6, 1990

Good morning, Mr. Chairman and members of the subcommittee. I am pleased to be here to present the fiscal year 1991 budget request for General Administration's Salaries and Expenses appropriation. I have with me today Uriel Gottesman, the Director of the Office of Budget Operations for General Administration.

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We have taken action to ensure that the Department's programs and operations are of the highest quality possible. First, we have launched a reinvigoration of the Commerce quality improvement program, calling upon the Commerce management team to dedicate themselves to the task. Second, we have identified a couple of key areas where we need to strengthen management oversight. To do this requires the increase of $989 thousand and 8 positions. While we recognize that resources are scarce, these areas promise sizable returns on investment, particularly in the case of major systems acquisition.

The FY 1991 Department of Commerce budget includes nearly $200 million for major system acquisitions, including such initiatives as modernizing the weather service, automating patent application and review, and upgrading census mainframes, to name a few. Not only are considerable resources involved, but programs depend on these new automated systems to accomplish their mission. We have temporarily assigned 3 positions to oversee major systems acquisition, but we need an additional $772 thousand and 6 more positions to ensure that we get the desired result without an unnecessary escalation in acquisition cost.

We also need to increase our investment in the Department's financial management systems. In recognition of this, I will soon establish a chief financial officer position in the Department to provide leadership and assume responsibility for improving bureau financial systems and for developing a single Department financial management system. To support the new CFO in these tasks, we are requesting $117 thousand and 1 position.

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This concludes my remarks. I would be happy to answer any questions you may have.

Mr. **Dwyer**. Thank you, Mr. Collamore.

How much was sequestered from your 1990 appropriation and what was the impact of that reduction on your activities?

Mr. **Collamore**. The amount was 1.4 percent, which was $352,000 for GA. I would say that we handled that mostly through lapsing positions, not filling a lot of vacancies, and cutting back on travel.

We had a hiring freeze for about the first six months I was in office. We had a freeze on hiring and all expenditures in the Office of the Secretary. Through those rather stringent practices, we were able to make do.

Mr. **Dwyer**. What impact did it have on your activities?

Mr. **Collamore**. I would like to say we still got the job done.

Mr. **Dwyer**. What was your original budget request from OMB this year?

Mr. **Collamore**. Our request to OMB was $33,935,000.

Mr. **Dwyer**. How about their reductions? How does that impact on your activities?

Mr. **Collamore**. The bulk of the reduction was approximately $3 million, which was for some building repairs. We have a leaky roof, among other things, and GSA has agreed to pursue the repairs within their budget.

Mr. **Dwyer**. They are going to provide you with pails and buckets?

[Laughter.]

Mr. **Collamore**. We had a few laid out already.

Mr. **Dwyer**. There are not that many blotters. How are they going to do this? Did they say?

Mr. **Collamore**. They are going to pursue the money in their appropriations.

OVERSIGHT FUNCTIONS

Mr. **Dwyer**. Wear a raincoat. You are requesting an increase of $391,000 and three positions to enhance procurement oversight functions, including on-site and coordination of major acquisitions and the planning thereof.

What specific problems do you plan to address with these additional resources?

Mr. **Collamore**. Mr. Chairman, the Commerce Department has a number of major acquisitions underway, as you know. The emphasis of this increase is on post-award monitoring of contractors to see that their products are meeting the program needs, to try to identify problems early, and to work with the contractors and the program people in order to solve them—hopefully, before the problems become such that my colleague, the Inspector General, needs to launch an investigation.

OFFICE OF SPACE COMMERCE

Mr. **Dwyer**. I don't want to go back to that leaky roof, but there is a sense of priorities here that concerns me. The Office of Space Commerce, what has been accomplished by the Office of Space Commerce in its initial year of operations?

Mr. **Collamore**. Well, one of the principal activities of the Office has been to support Deputy Secretary Murrin, who has been serving as one of the principals on the Vice President's National Space Council.

He has a seat on that Council, and the Office has been providing input to their policy discussions. The Office also has been providing us with a lot of information on foreign competition. In fact, in a couple of ways, the Office has been able to help United States firms get fair treatment overseas.

Mr. **Dwyer**. Would you be able to expand on that for the record and provide us with some examples of where it really has accumulated this valuable information? You outlined what they are supposed to be doing, but I would like to see if they have accomplished anything.

Mr. **Collamore**. I would be glad to, Mr. Chairman. We have a list of actual cases.

Mr. **Dwyer**. Fine, provide that for the record.

[The information follows:]

Office of Space Commerce Accomplishments

The Office of Space Commerce was officially established with Departmental Organizational Order #15-19 on December 2, 1988; the function existed about two years prior to that, providing staff support to the Secretary.

The Office of Space Commerce has accomplished a number of specific things since its inception in addition to the policy support and legislative analyses it provides to the Secretary and Deputy Secretary. For example:

Prepared a report on financing commercial space ventures, called "Commercial Space Ventures: A Financial Perspective."

Prepared a compendium of space business statistics called "Space Business Indicators," which was distributed to over 100 U.S. space firms.

Completed "Space Commerce: An Industry Assessment," which reviewed the state of the commercial space industry.

Intervened at the request of a major aerospace company to ensure fair treatment for the U.S. firm in Brazil and to counter intense lobbying by the governments of Canada and France on behalf of their industries.

Helped a U.S. consortium to obtain important market information and establish a business relationship with the Thai Government in a regional satellite procurement.

After the death of the President of Taiwan, worked with the US&FCS to open new lines of communication for a small entrepreneurial firm that lost contact with Taiwan's leadership.

Helped a small entrepreneurial company secure a contract to process NASA's commercial payloads.

Helped a private company secure a NASA contract to develop space hardware.

Sponsored a seminar in Rome that led the Italian Microgravity Advanced Research and Support Center to enter into five separate agreements with a small U.S. microgravity firm for U.S.-manufactured hardware and services.

Participated in a Washington, D.C., Space Business Roundtable project to develop and implement a week-long commercial space curriculum for Virginia and D.C. high school students.

Mr. **Dwyer**. We will have some more questions that I will submit to you, and you may provide the answers for the record, okay?

Mr. **Collamore**. Be glad to.

Mr. **Dwyer**. Mr. Early?

Mr. **Early**. Thank you.

I see that you were a Special Assistant to Mr. Baldrige for three years. I was a big supporter of his. I thought he was an outstanding Secretary.

Mr. **Collamore**. I would like to think that I learned an awful lot from him.

MAJOR SYSTEMS ACQUISITIONS

Mr. **Early**. The request for the special major acquisition, $200 million, what was your original request to OMB? Was that the full amount?

Mr. **Collamore**. For the $200 million figure?

Mr. **Early**. Yes.

Mr. **Collamore**. Okay.

Mr. **Early**. Are there any major systems or equipment that they cut?

Mr. **Collamore**. Yes.

Mr. **Early**. Would you provide for the record what was cut and what you think the consequences of the reduction are, what effect it will have?

Mr. **Collamore**. Sure.

[The information follows:]

Major Systems Acquisitions

The Office of Management and Budget (OMB) reduced the Department's request for major systems acquisitions by $21.7 million. The nature of the reductions and the impact on Department programs are described below.

$2.2 million for computer replacements at the Bureau of the Census. Non-critical equipment purchases were eliminated and some additional procurements were delayed. This will not have a major impact on Census programs.

$1.1 million for the Commercial Information Management System (CIMS) in the International Trade Administration. The reduction will not permit ITA to expand CIMS access to 24-hour operation or reduce the waiting time for CIMS during peak operations and will reduce ITA's ability to conduct in-depth contract market research. The effects of these changes will be minimal.

$18.2 million for the Advanced Weather Interactive Processing System/NOAAPORT in NOAA. The request to OMB for AWIPS/NOAAPORT was based on an ambitious procurement schedule which has not been realized. The program schedule has been slipping due to delays we are now encountering in the procurement process. At the level in the President's budget, award of the AWIPS Development Phase contract anticipates a delay of six months from the previous plan. Funding for the AWIPS contract and NOAAPORT communications is reduced in FY 1991 to reflect the six month delay.

$0.2 million for minor adjustments for PTO and NOAA systems. These adjustments do not have a significant impact on PTO or NOAA programs.

Mr. **Early**. Are the major systems on yearly plans as far as—is it a three-year, or five-year plan?

Mr. **Collamore**. They all have plans in different directions, yes. For the Weather Service, different parts of the Weather Service modernization have different plans.

Mr. **Early**. Okay, what are they roughly? What are the weather station plans? Is that a five-year plan, a three-year plan, what?

Mr. **Collamore**. I believe it is on a five-year plan, if I am not mistaken. The weather stations themselves, you are asking about? The Secretary approves of the plan, as you may know, and he has spoken to that most recently at his own hearing, that no weather stations will be closed unless he could certify that the new Weather Service has no degradation in service. He stands by that policy.

PRODUCT LIABILITY

Mr. **Early**. Okay, fine. I appreciate that. You know, there were a lot of things which Mr. Baldrige had suggested that the new Secretary indicated he was going to pick up. One was the product liability which I think is a major problem. In this administrative budget is there money to pursue that?

Mr. **Collamore**. I don't believe there is specific money to pursue it, Congressman, but I know it is a top priority of our General Counsel to work on that legislation and to work with the Congress and within the Administration.

In fact, it has become a top priority of Vice President Quayle as well.

Mr. **Early**. Would you provide for the record what you have in this budget for that or don't have in this budget that would delay that product liability legislation?

Mr. **Collamore**. Certainly.

[The information follows:]

Funds for Product Liability Legislation

General Administration has no funds in its FY 1991 budget specifically earmarked for product liability legislation. However, staff in the Office of Legislative Affairs and in the Office of General Counsel currently provide support to the passage of Federal product liability legislation as part of their designated responsibilities. We estimate that both offices combined will expend approximately $120,000 and one FTE in FY 1990 in support of product liability legislation. Depending on the outcome of Congressional action on the FY 1991 request, we anticipate maintaining the FY 1990 level of funding in FY 1991. In addition, our efforts are supported by other Commerce units in reviewing specific issues in their areas of expertise.

Mr. **Early**. Thank you very much.

Mr. **Dwyer**. Mr. Kolbe?

Mr. **Kolbe**. No questions, Mr. Chairman.

Mr. **Dwyer**. Again, we will submit questions to you and have you provide answers for the record.

I was just looking at the part of the file up here, and I can't help but comment—you did fix up the Secretary's entrance, and the roof still leaks. Again, I question someone's priorities. But we will send the questions over to you and you answer them for the record.

Thank you very much.

Mr. **Collamore**. Thank you very much.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

Office of Finance and Federal Assistance

QUESTION:

You are requesting an increase of $117,000 and one position to strengthen Departmental financial management controls, including development of an integrated Department-wide Financial and Management System. What specific additional activities do you believe are necessary in this area?

ANSWER:

Office of Management and Budget Circular A-127, "Financial Management Systems", mandates the development of a single, integrated Financial Management Information System. The Department is in the process of reassessing its strategy to comply with the circular's direction. Specifically, these additional resources will assist in developing and implementing that strategy as part of a comprehensive effort to ensure appropriate and consistent financial management practices throughout the Department; developing the capacity to generate standard, comprehensive Department-wide data; and installing efficient and state-of-the-art automated financial systems.

Additionally, the development and implementation of a strategy responsive to A-127 is necessary, not simply to comply with the mandates of the circular, but also to develop systems capable of correcting the material weaknesses identified in the Secretary's Federal Managers Financial Integrity Act letter to the President and the Congress. Many of the systems currently operated in the Department require major redesign or replacement in order to have the capacity to ensure and maintain required internal controls. It is essential to provide additional resources to this critical endeavor to ensure the functionality and integrity of the Department's financial systems.

Management and Information Systems

QUESTION:

You are requesting an increase of $381,000 and 3 positions to expand oversight activities for major Commerce information systems. How much do you expect to save on such systems if this increase is approved?

ANSWER:

The objectives of our oversight activity are twofold: 1) To increase the opportunities for successful major information systems development, operation and implementation in Commerce; and, 2) To avoid costs by timely completion of major systems, meeting program requirements and using reasonable resources. To achieve these objectives, it is necessary that sufficient resources be assigned to ensure that major information systems projects follow policy guidance, and to identify and resolve promptly issues that could delay or disrupt the completion of a project. Further, oversight activities assure compliance with information systems management policies, which, if neglected, could result in project delays and increased costs for operation, maintenance and enhancement in the future. The requested increase will be recovered many times over by increasing the opportunities for timely project completion and successful program implementation.

Procurement and Administrative Services

QUESTION:

You are requesting an increase of $391,000 and three positions to enhance procurement oversight functions, including on-sight reviews and coordination of major systems acquisitions planning. What specific problems do you plan to address with these additional resources?

ANSWER:

Due to budgetary and staffing limitations, the Department has been unable to implement a comprehensive procurement management on-site review program. Many of the procurement offices within the Department have not been reviewed by the Department's procurement oversight group in five years or more. On-site reviews are critical not only to ensure that procurements conducted throughout the Department are accomplished in accordance with laws and regulations, but also to meet the Department's requirement that the Procurement Executive certify to each agency's head that its procurement system meets approved criteria.

To establish an effective review program, we need to conduct an on-site review at each of the Department's procurement offices about every three years. This will result in conducting three on-site reviews a year. The General Services Administration performed a review of our Department's information resources procurement and management activities over a two-month period last fall. Their report, issued in February 1990, specifically recommends that the Department increase its on-site procurement management review activities.

Throughout the Department there are a number of procurements for major systems acquisitions which have recently been awarded or will be awarded in the near future. Examples include NEXRAD (Next Generation Radar), AWIPS-90 (Advanced Weather Information Processing System), ASOS (Automated Surface Observation System), and APS (Automated Patent System).

These systems involve Government expenditures in the hundreds of millions of dollars. Currently, there are only two personnel dedicated to Procurement Oversight within the Department, and because of other duties these two employees can spend less than half their time monitoring these major procurements. Increasing staff would dramatically increase our ability to monitor these procurements at the Department level.

Other duties of the procurement oversight group include: coordinating all the Department's Agency Procurement Requests (APR's) with GSA for information resources procurements; and managing the delegations of procurement authority from GSA. During the past year, GSA has substantially increased its requirements and activities relating to Delegations of Procurement Authority, adding to the workload of the oversight group.

Office of Space Commerce

QUESTION:

You are requesting an increase of $100,000 and one position to enhance coordination of space activities Department-wide, and improve information dissemination to industry on commercial space issues. Can you tell us what are some of the commercial space issues facing the Department and American industry in the coming year?

ANSWER:

Numerous studies have demonstrated the increasingly severe economic competition faced by U.S. industries in the international marketplace. We are deeply concerned about the continued health of U.S. space industries such as launch vehicles and satellites. The United States needs an aggressive program of investment in research and development, fair trade policies to open foreign markets, and a greater use of commercial sources by the Government in the procurement of space goods and services. Without at least these three interrelated efforts, we risk losing emerging markets to the very competitors who learned the space business from us.

The Office is working with DOD, NASA, DOT, industry, and the National Space Council to develop R&D strategies across a range of industries to keep the U.S. competitive in commercial space. In particular, the Department of Commerce wishes to combine its business focus with NASA and the private sector's technical expertise to develop a strategic plan for maintaining U.S. competitiveness in satellite communications into the next century. In this effort, the Office of Space Commerce has a serious need for a full-time satellite communications expert. Satellite communications is by far the largest segment of the commercial space industry -- one which the U.S. pioneered -- and currently generates nearly $3 billion a year for this country.

The additional $100,000 and one FTE requested for FY 1991 would be used largely for issues in satellite communications. In addition to satellite R&D planning, these resources would also allow us to:

- continue support for the Japan 301 negotiations in satellites;
- work effectively with the National Telecommunications and Information Administration in upcoming spectrum reallocations;
- integrate concerns with the competitiveness of the U.S. satellite industry with those of the U.S. launch vehicle industry for a response to government-supported foreign competitions.

Additionally, the Office of Space Commerce expects to address, in connection with other relevant agencies, the following issues in the months ahead:

- USSR launch services on the world market;
- the Cape York Space Port;
- commercial roles in the Space Exploration Initiative;
- international cooperation and competitiveness in the Space Exploration Initiative;
- Commercial Space Policy Strategy Review for the National Space Council;
- continuity of LANDSAT-type data;
- enhancing U.S. industrial competitiveness through the transfer and application of space-related technologies;
- government hurdles and regulations impacting entrepreneurial space ventures.

QUESTION:

Why is this office located under the Assistant Secretary for Administration rather than in the Department's Office of Technology Administration?

ANSWER:

The Office of Space Commerce is located in the Office of the Secretary, and reports directly to the Deputy Secretary of Commerce. One of the principal responsibilities of the Office of Space Commerce is to provide top-level coordination for space-related issues, programs, and activities within the Department. For this reason the Office of Space Commerce functions more effectively within the Office of the Secretary.

Priority of Requested Increases

QUESTION:

Most of the program increases included in your budget for FY 1991 were included in the FY 1990 budget request. Because of the overall budget situation in FY 1990, the Committee was not in a position to approve most of these increases. The Committee may face a similar situation for FY 1991. What are your priorities with respect to these increases?

ANSWER:

Our first priority is to safeguard our investment in the development and acquisition of new major information systems. For this, we need both $381,000 and three positions in the Office of Management and Information Systems, as well as $391,000 and three positions in the Office of Procurement and Administrative Services. Our next priority is the increase of $117,000 and one position to provide for the improvement of financial management systems throughout the Department. Our last priority is our request of $100,000 and one position for the Office of Space Commerce.

Reprogrammings, Relocations and Reorganizations

QUESTION:

Does the Department have written administrative regulations that include the general provisions of the annual appropriations acts regarding reprogrammings, reorganizations, and relocations? If not, when do you intend to complete such regulations and send a copy to the Committee?

ANSWER:

Department of Commerce Administrative Order 203-13, issued July 27, 1989, (attached) directs organizational units to abide by the general provisions of the annual appropriations acts regarding reprogrammings, reorganizations, and relocations. The Order specifies that the thresholds for reprogramming are those established by the appropriations committees. It also establishes a system of operating plans for the Department and defines a process for submitting and reviewing requests for changes to those plans.

QUESTION:

How does the Department interpret the terms "program, project, and activity" in regard to its own budget structure and the reprogramming provision of the Acts?

a. What is the most appropriate structure for controlling and reporting reprogrammings, i.e., by a programmatic breakdown of functions performed, or by organizational units, or a combination?

b. Does this structure match the form of the budget presented to the Committee for the annual budget review?

ANSWER:

Departmental Administrative Order 203-13, section 2.03, defines a "program, project, or activity" for the purposes of reprogramming as "the most specific budget item identified in the Congressional budget justifications; the enacted appropriation bill; and the House, Senate, and conference reports and explanatory statements associated with the appropriation bill."

The Department believes that a program/budget structure -- that is, a structure organized around programs or the broad purposes served -- is the best one for controlling funds, including controlling reprogrammings. Resource information reported in relation to the program/budget structure serves the policy analysis and decision-making responsibilities of the Department's senior executives.

Information reported in relation to a program/budget structure also serves the information requirements of the Congress, because it is consistent with the form of the budget currently presented to the appropriation committees.

QUESTION:

At what level of its budget structure does the Department control for reprogramming, i.e., at program or organizational level, activities within program/organization, or subactivities or projects?

a. Is the level for reprogramming control reasonable, in that it is not at too high a level so as to mask reprogrammings that would be of interest to the committee nor at too low a level where the values are relatively insignificant and excessive paperwork is generated to report reprogrammings?

ANSWER:

Department Administrative Order 203-13, section 2.03, specifies the "most specific budget item" described in Congressional justifications and associated documents as the level for controlling reprogrammings. Most Commerce appropriation accounts have three levels of detail -- activities, subactivities and line items. The Order's provisions, in effect, set the level of control at no higher than the line item.

The Department believes that plans and budgets are best stated, reviewed, and approved in terms of broad, programmatic purposes. Plans and budgets may contain additional detail, but the commitments made by the Department and the approval granted by the Congress ought to focus on the larger programmatic issues. Setting the level for controlling reprogramming at the subactivity level would be consistent with this view.

If revising the level for reprogrammings is not feasible, the Department would propose a review of the current program/budget structure, to ensure, in particular, that line items define meaningful programmatic units and provide the appropriate level of detail. In the current structure, the funds for some line items are so small that they are unlikely to be of any interest to the committees and controlling for reprogrammings presents a real danger of excessive and unnecessary paper work.

QUESTION:

Does the Department track all specific amounts that have been earmarked in Committee reports by relating obligations to these amounts to identify reprogramming needs for reporting?

ANSWER:

Organizational units within the Department are responsible for controlling their own funds. Through the definition of "program, project and activity," Department Administrative Order 203-13 clearly directs organizational units to track all amounts specified by the Congress in the appropriation bill and any of the reports and statements accompanying it.

QUESTION:

Does the Department have the accounting capability to relate obligations in a timely manner with the reprogramming base of its structure so that advanced notice of planned reprogrammings can be given to the Committee? If not, what is the Department doing to improve its capability to detect reprogramming needs before it is too late in the year to notify the Committee?

a. In the event that circumstances beyond the Department's control prevent notification of unforeseen reprogrammings before the end of the year, how long would it take to report to the Committee after the fact with an explanation of the circumstances?

ANSWER:

Currently the department's organizational units operate their own financial systems, including accounting systems. The existing systems are basically capable of providing managers with appropriate information about obligations in relation to the reprogramming guidelines. Cases where data are incomplete or not timely reflects management decisions about how to use the systems, about issues like proper data structures and classification schemes, methods to reallocate indirect costs, or the relative importance attached to reporting against the reprogramming guidelines.

Many of these financial systems are relatively old, however, and in need of revision and enhancement. Pursuant to the Office of Management and Budget's Circular A-127, "Financial Management Systems," the Department has underway a program to install a single, integrated financial management system throughout the Department. One of the goals of the integrated system is to ensure that managers have appropriate and timely information about obligations and the use of funds in general.

Although the Department's current guidance does not anticipate the failure to report the need for a reprogramming on a timely basis, the Department would expect an organizational unit to report and explain such a failure as soon as practicable, once it was uncovered.

QUESTION:

With respect to appropriated funds available for more than one year, does the Department include the carryover of prior year funds in its reprogramming base for control and reporting? If not, does the Department realize that when the carryover is not included in the base, those funds are not under any reprogramming control and that actual reprogrammings may go undetected for that reason?

a. If carryovers are available for agency purposes in subsequent fiscal years, are they subject to departmental oversight and approval?

b. What is the departmental policy with regard to unobligated balances carried forward to the subsequent fiscal year? Can they be retained only for the original specified purpose in the absence of formal reprogramming approval?

ANSWER:

Within no-year appropriation accounts, funds carried over from a prior year and funds recovered from prior-year obligations are to be included in a given program, project, or activity's reprogramming base. They are to be available in subsequent years only for the program purposes for which they were originally made available.

The Department reviews the allocation of funds carried forward from prior years as part of its review of summary financial plans submitted by the organizational units. Nevertheless, Department Administrative Order 203-13 does not contain specific guidance on this point. The Department is determining whether revising the Order is the best means to convey this additional guidance to organizational units.

QUESTION:

What is the Department's policy regarding notifying the Committee in advance of planned local moves costing $500,000 or more? Has the Department regularly informed the Committee of such moves in the past?

ANSWER:

Department Administrative Order 203-13, section 2.06, makes clear that it governs "the establishment, consolidation, abolishment or other significant change affecting an organizational unit's status, configuration, or mission, or the authority and duties of its management and staff." Section 4 of the Order sets forth the Department's policy regarding notification requirements to the Congress.

The Department has regularly informed the Committee of such moves in the past.

Questions Submitted by Congressman Rogers

Office of Space Commerce

QUESTION:

Please summarize the mission and accomplishments of the Office of Space Commerce.

ANSWER:

As stated in the Office of Space Commerce's Departmental Organizational Order signed in December 1988, the Office of Space Commerce is the principal unit for the coordination of space-related issues, programs and initiatives within the Department. Under the Departmental Organizational Order the office is to:

- collect, analyze and disseminate information on space markets;
- assist commercial space companies in their efforts to do business with the U.S. government by acting as an advocate within the Executive Branch;
- strive to ensure the U.S. government does not engage in activities that would preclude or deter commercial activity;
- promote the export of space-related goods and services;
- work to ensure free and fair trade with the space industry's international competitors, and;
- seek the removal of legal, policy and institutional impediments to space commerce.

The list of accomplishments was provided for the record at the request of Congressman Dwyer. They are included here below, as well.

The Office of Space Commerce has accomplished a number of specific things since its inception in addition to the policy support and legislative analyses it provides to the Secretary and Deputy Secretary. For example:

o Disseminating and analyzing critical business information.

  - Completed a report on financing commercial space ventures, called Commercial Space Ventures: A Financial Perspective.

- -- Prepared a compendium of space business statistics called Space Business Indicators, which was distributed to over 100 U.S. space firms.

- -- Completed Space Commerce: An Industry Assessment, which reviewed the state of the commercial space industry.

o Assisting U.S. space companies to win contracts in foreign markets.

- -- Intervened at the request of a major aerospace company to ensure fair treatment for the U.S. firm in Brazil and to counter intense lobbying by the governments of Canada and France on behalf of their industries.

- -- Helped a U.S. consortium to obtain important market information and establish a business relationship with the Thai Government in a regional satellite procurement.

- -- After the death of the President of Taiwan, worked with the US&FCS to open new lines of communication for a small entrepreneurial firm that lost contact with Taiwan's leadership.

o Ensuring the U.S. Government buys commercially developed space goods and services to the fullest extent feasible - as required by the President's National Space Policy of November 1989.

- -- Helped a small entrepreneurial company secure a contract to process NASA's commercial payloads.

- -- Helped a private company secure a NASA contract to develop space hardware.

o Conducting trade seminars to introduce U.S. space companies to emerging foreign markets.

- -- Sponsored a seminar in Rome that led the Italian Microgravity Advanced Research and Support Center to enter into five separate agreements with a small U.S. microgravity firm for U.S.-manufactured hardware and services.

o Promoting commercial space activities at the state level.

-- Participated in a Washington, D.C., Space Business Roundtable project to develop and implement a week-long commercial space curriculum for Virginia and D.C. high school students.

QUESTION:

Since the Office of Space Commerce is primarily tasked with the fostering of commercial space development, would this activity not be more appropriately located within the Technology Administration?

ANSWER:

The Office of Space Commerce is located in the Office of the Secretary, and reports directly to the Deputy Secretary of Commerce. One of the principal responsibilities of the Office of Space Commerce is to provide top-level coordination for space-related issues, programs, and activities within the Department. For this reason, the Office of Space Commerce functions more effectively within the Office of the Secretary.

TUESDAY, MARCH 6, 1990.

OFFICE OF THE INSPECTOR GENERAL

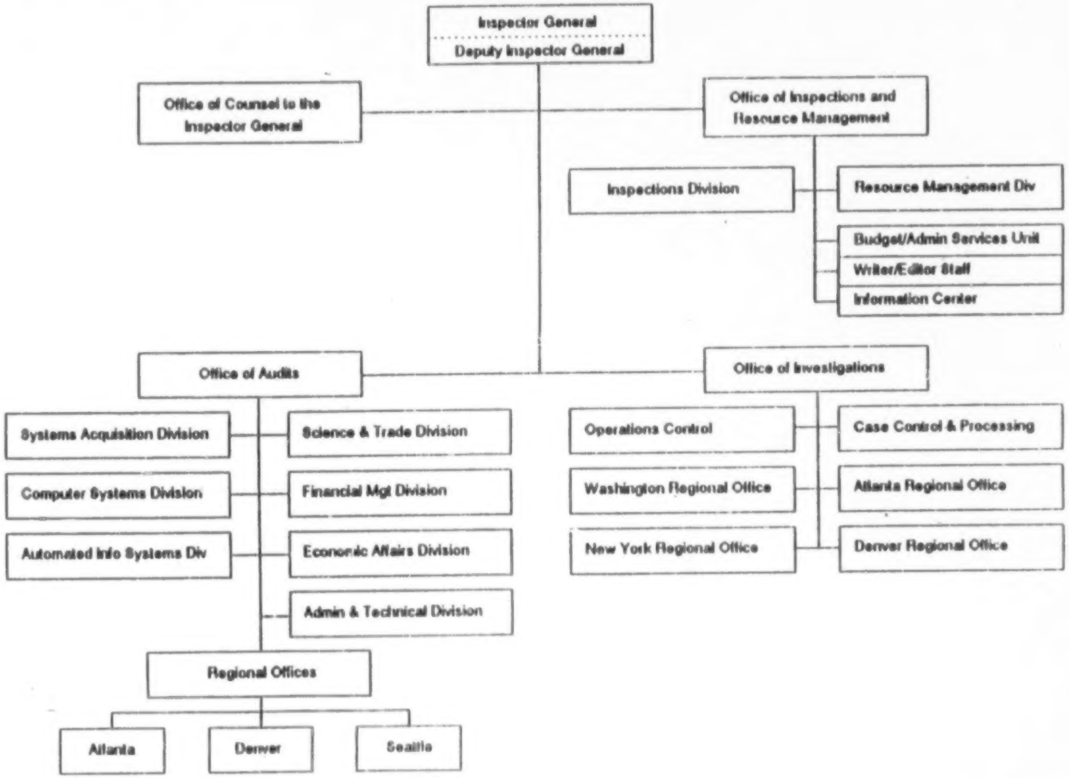
WITNESSES

FRANK DEGEORGE, INSPECTOR GENERAL

Mr. DWYER [presiding]. The second item that we will consider today is the Fiscal Year 1991 budget request for the Office of the Inspector General in the Department of Commerce. The request is for $15,115,000, an increase of $1,784,000 above the appropriation for Fiscal Year 1990, and we shall insert the budget justification submitted in support of this request into the record at this point.

[The justification follows:]

U. S. DEPARTMENT OF COMMERCE
OFFICE OF INSPECTOR GENERAL
ORGANIZATION CHART


Inspector General
Deputy Inspector General
Office of Counsel to the Inspector General
Office of Inspections and Resource Management
Inspections Division
Resource Management Div
Budget/Admin Services Unit
Writer/Editor Staff
Information Center
Office of Audits
Office of Investigations
Systems Acquisition Division
Science & Trade Division
Computer Systems Division
Financial Mgt Division
Automated Info Systems Div
Economic Affairs Division
Admin & Technical Division
Regional Offices
Atlanta
Denver
Seattle
Operations Control
Case Control & Processing
Washington Regional Office
Atlanta Regional Office
New York Regional Office
Denver Regional Office

Appropriation Summary Statement

Appropriation: Office of the Inspector General

The appropriation "Office of the Inspector General" provides for the detection and the prevention of fraud, waste, abuse and mismanagement of government funds in Commerce programs and operations; the promotion of economy and efficiency in Commerce operations; and assistance to the Department in reducing costs and in providing more effective delivery of programs.

The Office of the Inspector General performs agency-wide audits, inspections and investigations to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste and mismanagement. In carrying out these responsibilities the Office will concentrate on those programs and operations which have the greatest potential for identifying fraud, recovering funds, precluding unnecessary outlays, and improving management.

Accomplishments planned for FY 1991 include:

- o Increasing the number of inspections, expanding the scope of inspections to include the U.S. and Foreign Commercial Service field operations.
- o Improving the value of the Inspector General's findings and recommendation to senior Department management.
- o Enhancing the Inspector General's ability to review areas of high technology, especially automated data processing systems.

The budget request for "Office of the Inspector General" for 1991 is $15,115,000, which includes built-in changes of +$877,000 and program increases of $907,000.

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of adjustments to base:					
	Appropriation enacted, 1990					$13,500
	Sequester applied, 1990					(169)
	Appropriation currently available, 1990	Pos./BA			209	13,331
		FTE/Obl.			197	13,331
	FY 1991 Adjustments to base:					
GA-48	Adjustment for 1990 pay increase and related costs			355		
GA-48	Other cost changes			522		
	Subtotal, adjustments to base:					877
	1991 Base	Pos./BA			209	14,208
		FTE/Obl.			197	14,208

	Comparison by activity:		1989 Actual Personnel	1989 Actual Amount	1990 Currently Available Personnel	1990 Currently Available Amount	1991 Base Personnel	1991 Base Amount	1991 Estimate Personnel	1991 Estimate Amount	Increase/(Decrease) over 1991 Base Personnel	Increase/(Decrease) over 1991 Base Amount
GA-53	Inspector General	Pos./BA	209	$14,008	209	$13,331	209	$14,208	214	$15,115	5	$907
		FTE/Obl.	196	13,970	197		197		202		5	
	TOTAL	Pos./BA	209	14,008	209	13,331	209	14,208	214	15,115	5	907
		FTE/Obl.	196	13,970	197		197		202		5	

Note: In FY 1989 funding for the Office of the Inspector General was provided through the "Salaries and expenses" appropriation; FY 1989 actuals are shown for comparison purposes only.

Department of Commerce
General Administration
Office of the Inspector General

SUMMARY OF REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Reimbursable Obligations	Pos./BA	0	$0	0		0		0		0	
	FTE/Obl.	0	$0	0	$330	0	$330	0	$330	0	0
TOTAL	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	0	0	330	0	330	0	330	0	0

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$0	$13,661	$14,538	$15,445	$907
Financing:					
Offsetting collections from:					
Federal funds		(330)	(330)	(330)	
Trust funds					
Non-Federal sources					
Recoveries					
Unobligated balance, start of year					
Unobligated balance transferred					
Unobligated balance, end of year					
Unobligated balance lapsing					
Budget Authority	0	13,331	14,208	15,115	907
Financing from proposed transfers:					
Sequester		169			
Appropriation	0	13,500	14,208	15,115	907

Note: The Office of the Inspector General had no separate appropriation in FY 1989; however, a comparable amount in the budget authority was $14,008 in FY 1989.

Department of Commerce
General Administration
Office of the Inspector General
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
Estimated Cost Changes:		
Personnel compensation		
Full-time permanent		507
Other than full-time permanent		2
Total, Personnel compensation	0	509
Civilian personnel benefits		265
Rental payments to GSA		46
Communications, utilities and miscellaneous charges		(37)
Other services		91
Supplies and materials		3
Total	0	877

Department of Commerce
General Administration
Office of the Inspector General
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

Object Class

11. and 12. Personnel Compensation and Benefits:

			FTE	Amount
Adjustment for 1990 pay increase and related costs				+355
Total cost in 1990 of pay increase		+$265,000		
Less amount absorbed		(265,000)		
Anticipated 1990 pay increase supplemental		0		
Amount in 1991 to provide full-year cost of pay increase		+355,000		
Less amount absorbed in 1991		0		
Subtotal, adjustment for 1990 pay raise		+$355,000		

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, GA, OIG is absorbing the full cost of this pay increase.

			FTE	Amount
Adjustment for 1991 pay increase and related costs				+173
Total cost in 1991 of general pay increase	+$252,000			
Less amount absorbed	(126,000)			
Subtotal adjustment for 1991 general pay increase		+$126,000		
Total cost in 1991 of SES pay increase	94,000			
Less amount absorbed	-47,000			
Subtotal, adjustment for 1991 SES increase		+47,000		
Total adjustment for 1991 pay increases		+$173,000		

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

	FTE	Amount
Compensable days		+35

The cost of one more compensable day in FY 1991 is calculated by dividing the FY 1990 estimate for personnel compensation and benefits by the number of compensable days, 260, for an increase of $35,100.(($8,183,000 + 943,000) / 260)

	FTE	Amount
Civil Service Retirement System (CSRS)		(21)

The number of employees covered by CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employees' Retirement System. We estimate the percentage of payroll of employees who are covered by CSRS will drop from 76.90 percent in 1990 to 73.20 percent in 1991. This will result in a decrease of 3.70 percent in the cost of CSRS contributions, for a decrease of $21,194. ($8,183,000 x .07 x .037)

	FTE	Amount
Federal Employees' Retirement System (FERS)		+40

The number of employees covered by FERS will continue to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees covered by FERS will rise from 23.1 percent in 1990 to 26.8 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.0 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($8,183,000)	
Basic benefit cost in 1990 ($8,183,000 x .231 x .1297)	$245,168
Basic benefit cost in 1991 ($8,183,000 x .268 x .13)	285,096
Increase in basic benefit contributions (1991 - 1990)	+$39,928

	FTE	Amount
Thrift plan		+6

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll of employees covered by FERS will increase by 3.7 percent, from 23.1 percent in 1990 to 26.8 percent in 1991. We estimate the agency contribution for switchers will be 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Total Thrift Savings Plan increase ($8,183,000 x .037 x .02)	+$6,055

	FTE	Amount
Federal Insurance Contributions Act (FICA)		+22

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in 1991 from $50,025 in 1990, therefore, the percentage of salary subject to FICA will increase from 91.27 percent in 1990 to 93.19 percent in 1991. The OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in 1991. This will result in an increase of $20,353 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 ($8,183,000 x .231 x .9127)	$1,725,252	
FERS OASDI tax in 1990 ($1,725,252 x .0617)		$106,448
FERS payroll subject to FICA tax in 1991 ($8,183,000 x .268 x .9319)	2,043,698	
FERS OASDI tax in 1991 ($2,043,698 x .0620)		126,709
Increase (1991 - 1990)		+$20,261
Other payroll not covered by retirement systems ($63,000)		
Other payroll subject to FICA tax in 1990 ($63,000 x .9127)	$57,500	
OASDI tax in 1990 ($57,500 x .0617)		$3,548
Other payroll subject to FICA tax in 1991 ($63,000 x .9319)	58,710	
OASDI tax in 1991 ($58,710 x .0620)		3,640
Increase (1991 - 1990)		92
Total OASDI increase		+$20,353

Medicare:

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 91.27 percent in 1990 to 93.19 percent in 1991 as the maximum salary subject to FICA tax increases. The cost of medicare will increase as follows:

Total payroll ($8,303,000)		
Total payroll subject to FICA in 1990 ($8,288,000 x .9127)	$7,564,458	
Total payroll subject to FICA in 1991 ($8,288,000 x .9319)	7,723,587	
Increase in payroll subject to FICA (1991 - 1990)	+159,129	
Increase in Medicare tax ($159,129 x .0145)		+$2,307

	FTE	Amount
Health insurance . . . . According to the Office of Personnel Management, the government's contribution for health insurance premiums has increased by an average of 28% in FY 1990. Applied against a base of $377,000, the increase is $105,560.		+106
Employees Compensation . . . . For the first time, Inspector General is being billed by the Office of Workers Compensation programs in the amount of $58,332. Therefore, the adjustment to base is the full amount rounded to $58,000.		+58
Total, Personnel compensation and benefits	0	+774
23.1 Rental payments to GSA. . . . . The GSA estimates a 4.4 percent increase for the 1991 rent payment. Applied against a base of $1,035,000 the increase is $45,540.		+46
23.3 Communications, Utilities and Miscellaneous Charges		
Federal Telecommunications System - 2000 . . . . Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.		(37)
25. Other Services		
Working Capital Fund charges . . . . The General Administration's Working Capital Fund charges necessary to maintain the current level of operations has increased by $91,000 over a base of $877,000.		+91
26. Supplies and materials. . . . . The increase in supplies and materials is based on the 1991 GNP deflator of 4.2 percent. Applied against a base of $67,000 the increase is $2,814.		+3
Total FY 1991 Adjustments to Base and Built-in-Changes	0	+877

Appropriation Language and Code Citations:

Appropriation: Office of the Inspector General

1. For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, as amended, $15,115,000.

5 U.S.C. App.3, as amended by P.L.100-504

Section 2 of the Inspector General Act of 1978 (5 U.S.C. App.3), as amended, provides that "in order to create independent and objective units - (1) to conduct and supervise audits and investigations relating to programs and operations of the establishments listed in section 11(2)...there is hereby established in each of such establishments an office of Inspector General." Section 11(2) of the Act reads, "the term `establishment' means the Department of... Commerce..."

31 U.S.C sec. 1105, as amended by P.L.100-504

The Inspector General Act Amendments of 1989 (P.L.100-504) amended 31 U.S.C sec. 1105(a). As amended, this section provides that "the President shall include in each budget the following... a separate appropriation account for appropriations for each Office of Inspector General of an establishment defined under section 11(2) of the Inspector General Act of 1978."

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

Subactivity		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction	Pos./BA	13	$504	13	$955	13	$1,024	13	$1,024	0	$0
	FTE/Obl.	13	980	13		13		13		0	
Inspections & Resource Management	Pos./BA	25	1,519	28	1,843	28	1,951	33	2,341	5	390
	FTE/Obl.	23	1,689	24		24		28		4	
Audits	Pos./BA	130	9,324	130	8,171	130	8,698	130	9,215	0	517
	FTE/Obl.	122	8,677	122		122		123		1	
Investigations	Pos./BA	41	2,661	38	2,362	38	2,535	38	2,535	0	0
	FTE/Obl.	38	2,624	38		38		38			
Total	Pos./BA	209	14,008	209	13,331	209	14,208	214	15,115	5	907
	FTE/Obl.	196	13,970	197		197		202		5	

Department of Commerce
General Administration
Office of the Inspector General
JUSTIFICATION OF PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

Goals and Objectives

GOALS:

- Prevent and detect fraud, waste, and abuse in Commerce programs and operations, both internal and external.
- Promote economy and efficiency in Commerce operations.

OBJECTIVES:

- Concentrate on those programs and operations which have the greatest potential for: identifying fraud; recovering funds precluding unnecessary outlays; and improving management.
- Improve the value of the Inspector General's findings and recommendations to senior Department management.
- Enhance the Inspector General's ability to review areas of high technology, especially ADP.
- Establish a minimal deterrence presence in all external operations of the Department.
- Increase oversight of Federal Management Financial Integrity Act related weaknesses.

Base Program FY 1991

The Office of Inspector General (OIG) was established in FY 1979 in accordance with the Inspector General Act of 1978. The OIG provides an independent voice to the Secretary and other senior Commerce managers in matters relating to fraud, waste, abuse and mismanagement. The Office has the authority to inquire into all program and administrative activities of the Department, including those individuals or organizations performing under grants, contracts or loans.

The work is conducted through audits (management and financial), investigations and inspections. The findings of the audits and inspections are presented to the pertinent operating officials and agency heads, who are given an opportunity to review and comment upon the reports before they are released in final form. Investigations are referred to the U.S. Department of Justice for prosecution where evidence of criminal wrongdoing is uncovered or if civil recoveries are possible. Investigative findings may also be referred to the appropriate agency official for administrative redress.

The Office of Inspector General is headquartered in Washington, D.C., and maintains six regional offices. The Office of Audits has organizations in Atlanta, Denver, and Seattle. The Office of Investigations has organizations in Atlanta, Boulder and Newark. As proposed for FY 1991, the OIG will be funded at 214 permanent employees, 65 of whom will be located in the field.

The mission of the OIG is accomplished through the following activities:

Executive Direction includes the immediate office of the Inspector General and the Office of Counsel; provides overall leadership and policy direction, including reviews of proposed and existing Departmental legislation and regulations; and provides legal assistance for auditors, investigators and inspectors.

Inspections and Resource Management performs inspections of Departmental organizations; develops and evaluates the policies and procedures of the OIG; and evaluates OIG internal operations; and provides personnel, budget and other administrative support services.

The inspections program within the Office of Inspections and Resource Management was created to expand the coverage of the OIG in the Department of Commerce. Before the program was established in 1982, the OIG had an audit cycle of over 35 years, and over 97 percent of the Department had never been visited by OIG.

Inspections are brief reviews of Commerce units in the field and Headquarters, or of a firm or organization which receives funds from the Department. They are intended to (a) gather current information about programmatic and administrative problems while there is still time to correct them, and (b) to highlight for Department managers those activities which are being performed well. The inspection team (usually three persons with audit, investigation and/or management analysis background) provides immediate debriefings to agency management upon its return from a visit, and a written report is issued shortly thereafter. Significant problems identified during an inspection are brought to agency managers or referred to OIG auditors or investigators for follow-up.

An inspection differs from an audit in terms of timelines, depth of inquiry, and procedures which govern its performance. Because of the freshness of the inspection and findings, they have been positively received by Commerce management. Since late in FY 1982, when the inspections program started, the OIG has made over 175 inspections.

Audits performs management audits of Commerce programs, operations and significant procurements; performs financial and compliance audits of DOC contracts, grants, cooperative agreements, loans, and loan guarantees; performs audits of the Department's major computer system development efforts and established ADP systems; and arranges for pre-award audits of contracts receiving Commerce funds.

The Office of Audits conducts reviews of varying scope both of internal Department programs and operations (management audits) and of external activities funded by or through the Department; specifically contracts, grants, cooperative agreements, loans, and loan guarantees (external audits).

A management audit can be one or more of the following: (1) a financial and compliance audit, to determine compliance with laws, regulations and sound accounting procedures; (2) an efficiency and economy audit, to determine whether resources are being managed efficiently and economically and whether adequate internal controls are in place; and/or (3) a program results audit, to determine whether the desired benefits of a program are being achieved. This type of audit concentrates on the delivery of services, program results, legislative effectiveness, cost effectiveness, and vulnerabilities. Given the broad scope of such an effort, management audits require significant commitments of time and personnel.

External audits are designed to determine one or more of the following: (1) adequacy of accounting procedures and internal controls; (2) allowability of costs; (3) compliance with laws, regulations, and the terms and conditions of the award; and/or (4) whether the project achieved the desired results or reflected the performance level required (i.e., did the taxpayers get what they paid for?).

In accordance with the Single Audit Act and OMB Circular A-128, the Office also is responsible for reviews of organization-wide audits of state and local governments which receive Commerce funds.

Studies performed by the President's Council on Integrity and Efficiency indicate that most fraud is not committed within the Government, but is perpetrated against it from the outside. Recognizing this, the Office of Audits pioneered a program which provides for OIG review of recipients of large amounts of financial assistance before the award funds have been disbursed. The methodology was developed and tested in the audit of the Department's public works programs, where millions of dollars already have been identified as "up-front" savings. This technique has been extended to other Department grant programs and was the basis for beginning a program of loan audits.

The Department is developing numerous major information systems with total life-cycle costs of $3 billion. The OIG's Office of Audits (OA) encourages Commerce agencies to analyze the costs, benefits and risks associated with alternatives for satisfying the automation requirement; and improve demonstration testing to show that systems will deliver desired benefits before full system production and delivery. These audits analyze if Commerce systems will be delivered on time, at reasonable cost, and will work. OA provides independent reviews of Department of Commerce ADP security programs through evaluation and testing of Departmental computer sites and systems. OA tests electronic and physical access controls in established Commerce ADP security regulations. Also, OA reviews Commerce ADP development efforts for compliance with ADP security regulations.

In the major procurement area, OA encourages Commerce agencies to use pre-award audit and evaluation information in negotiating contracts for significant systems. By using more audit and evaluation information, Commerce agencies will receive the best prices in major negotiated procurements. OAIS conducts compliance reviews of Commerce contracting offices to ensure that the necessary pre-award audits are being requested. The compliance reviews have increased the number and effectiveness of pre-award contract audits in the Department. Pre-award audits have historically resulted in cost avoidance of eight to fifteen percent of contract costs.

OA arranges for the Defense Contract Audit Agency (DCAA) to conduct pre-award and interim cost incurred audits. The cost incurred audits determine if the Department gets what it pays for. In arranging for the pre-award audits, OA (1) sees that sufficient documentation has been submitted to support requests for audits and returns inadequate requests, (2) incorporates technical evaluations of cost in the audit reports when not provided by Commerce agencies, (3) meets with DCAA auditors to become knowledgeable about complex audit findings, (4) reviews and forwards audit reports to auditees and returns audit reports for additional work, and (5) attends negotiation conferences to provide audit support to Commerce contracting officers.

Finally, OA conducts audits of significant Commerce procurements to determine if Department contracting activities comply with the Federal Acquisition Regulations, Federal Information Resources Management Regulations, etc.

Investigations conducts investigations of alleged or suspected criminal wrongdoing by Commerce employees, grantees, contractors and loan recipients. The mission of the Office of Investigations is to prevent and detect fraud involving Commerce funds, and abuse by Departmental employees, contractors, and recipients of financial assistance.

The OIG, therefore, concentrates its criminal investigative effort on those Commerce programs which fund external activities, where the potential for fraud is greatest or where early detection can prevent major problems from occurring later.

The Office of Investigations continues to support the Department's Office of Finance and Federal Assistance by conducting name checks on individuals and credit checks on businesses before award of a Commerce grant or loan.

As a general rule, the Office of Investigations does not handle cases involving personnel abuses or other administrative matters. Instead, the OIG refers them to the appropriate Commerce agency for action. The OIG will monitor the case through to its disposition and provide technical assistance to the agencies on how to conduct their reviews. Exceptions are made when the alleged infraction involves a senior Department official, or if the alleged conduct is criminal or otherwise appears egregious. Where it is practicable to do so, the OIG advises complainants of the disposition of the matter referred to it.

Return on Investment

The OIG is a level-of-effort activity with a direct correlation between staffing and the return on investment. In the past four and a half years, there have been 329 convictions, indictments and administrative sanctions. OIG recommendations have resulted in management commitments to recover or more efficiently use $584 million, at a total cost in OIG budgets of $58.9 million. This is a benefit-to-cost ratio of nearly ten to one. This does not include the nonfinancial yield of investigations, inspections and audits.

The quantified FY 1989 - FY 1991 results and projections of OIG operations are:

(Dollar amounts in thousands)

	1989 Actual	1990 Projected	1991 Proposed
Number of Management audits	30	28	28
Number of Contract, grant and loan audits issued	90	100	100
Number of C/G/L audits processed	797	840	840
Number of ADP audits	16	20	20
Number of Inspections	30	35	50
Number of Investigations	125	220	220
Management commitments:			
To more efficiently use funds	$131,394	...	...
Investigative Recoveries	$ 538	...	...
Total Savings	...	...	...
Indictments/Convictions	17/15	...	...
Administrative sanctions	70	...	...

Department of Commerce
General Administration
Office of the Inspector General
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Office of Inspections and Resource Management.	Pos./BA	28	$1,951	33	$2,341	5	$390
	FTE/Obl.	24		28		4	

Expansion of inspections of U.S. and Foreign Commercial Services (U.S. and FCS) field operations (4 FTE, +$390,000)

The Commerce Office of Inspector General is responsible for conducting audits, investigations, and inspections of the various departmental operations, including those within the U.S. and Foreign Commercial Service. However, because staff is limited, the office has been unable to devote the resources that would be necessary to perform inspections of U.S. and FCS field operations throughout the U.S. and in 65 foreign countries on a five-year cycle, as was originally envisioned by the Congress. Any attempt to do so under the present conditions would significantly hinder efforts in other areas of the Department and cripple other important OIG initiatives.

With existing staff, the office has been able to provide resources to conduct the equivalent of six reviews each year of U.S. and FCS field offices, whereas about 24 offices need to be inspected each year to meet the five-year cycle. Considering the problems that have been identified at U.S. and FCS field offices in reviews by the General Accounting Office, the Office of Inspector General, and others, it is increasingly apparent that each of these offices should receive regular inspections. This conclusion is further supported by the Omnibus Trade Bill of 1989 recently passed by the Congress which calls for regular reviews of U.S. and FCS operations by the Commerce Inspector General. With the addition of five positions dedicated to U.S. and FCS inspections, the office will conduct 24 inspections each year, thus achieving a five-year cycle for the field offices. This would include inspections of eight domestic offices and 16 foreign country posts each year.

	1991	1992	1993	1994	1995
Direct Obligations	390	390	390	390	390
Budget Authority	390	390	390	390	390
Outlays	374	385	390	390	390
FTE	4	4	4	4	4

Exhibit 12

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: INSPECTIONS AND RESOURCE MANAGEMENT
Program Change: INSPECTIONS OF U.S. AND FOREIGN COMMERCIAL SERVICES (FCS) FIELD OPERATIONS

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	171
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.9	Total personnel compensation	171
12.1	Civilian personnel benefits	43
21	Travel and transportation of persons	113
22	Transportation of things	0
23.1	Rental payments to GSA	19
23.3	Communications, utilities and miscellaneous charges	2
24	Printing and reproduction	5
25	Other services	25
26	Supplies and materials	8
31	Equipment	4
99	Direct obligations	390

tment of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: INSPECTIONS AND RESOURCE MANAGEMENT
Program Change: INSPECTIONS OF U.S. AND FOREIGN COMMERCIAL SERVICES (FCS) FIELD OPERATIONS

Title:	Grade	Number	Annual Salary	Total Salaries
INSPECTOR	14	1	52,104	52,104
INSPECTOR	13	4	44,092	176,368
Total		5		228,472
Less lapse (25%)		(1)		(57,118)
Total full-time permanent		4		171,354

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	4
Other than full-time permanent	
Total	4
Authorized Positions:	
Full-time permanent	5
Other than full-time permanent	
Total	5

Department of Commerce
General Administration
Office of the Inspector General
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Office of Audits	Pos./BA	131	$8,698	131	$9,215	0	$517
	FTE/Obl.	122		123		1	

Provide technical assistance capability for program and system audits (1 FTE, +$517,000) - This request will assist the OIG in its audits and inspections of the sophisticated automated systems as well as scientific and economic activities which require technical expertise not currently available on the staff.

The Department of Commerce is one of the most diversified civilian departments; for example, Commerce satellites probe the earth's atmosphere, its ships map the ocean floor, and its planes plot the course of hurricanes. In addition, other Commerce agencies make direct and guaranteed loans, count the U.S. population, recommend telecommunications policy, finance public radio and television facilities, and regularly assess and report on the status of the Nation's economy. By law, the OIG is charged to review this diverse array of programs and reach judgments on how efficiently and effectively the work is carried out. To do this, the OIG conducts audits and inspections of department organizations and activities.

Specific audits planned for 1990-1991 include:

- NOAA Corps Staff Utilization
- NOAA Ship Upgrade and Replacement
- National Weather Service Modernization
- Polar Orbiting Satellite Alternatives
- LANDSAT Commercialization
- Patent and Trademark Staff Utilization, Overtime, and Union Relationships
- Gross National Product Process
- 1990 Census

Audits and inspections performed by in-house staff are conducted on organizations and programs ranging from applied science, weather forecasting, loan administration, engineering, and business administration. However, as the OIG has begun to tackle the more sophisticated automated systems as well as the scientific and economic activities, concentrating on utilization of staff and equipment, technical capabilities beyond those of our in-house staff are needed. Individuals are required with analytical abilities in areas as diverse as: management science; computer science; economics; and industrial, system and software engineering.

Since these needs for technical assistance are so varied and generally for limited periods of time, it would be advantageous to obtain this assistance through contacts and temporary employees rather than full time employees with all of the attendant costs. The Inspector General Act of 1978 authorizes the Inspector General to obtain such temporary technical assistance as needed to carry out the requirements of the Act.

	1991	1992	1993	1994	1995
Direct Obligations	517	517	517	517	517
Budget Authority	517	517	517	517	517
Outlays	495	509	517	517	517
FTE	1	1	1	1	1

Exhibit 12

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: OFFICE OF AUDITS
Program Change: TECHNICAL ASSISTANCE

Object Class		1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	52
11.5	Other personnel compensation	0
11.9	Total personnel compensation	52
12.1	Civilian personnel benefits	4
21	Travel and transportation of persons	10
22	Transportation of things	0
23.1	Rental payments to GSA	4
23.3	Communications, utilities and miscellaneous charges	3
24	Printing and reproduction	5
25	Other services	424
26	Supplies and materials	5
31	Equipment	10
99	Direct obligations	517

Depa. of Commerce
General Administration
Office of the Inspector General
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: INSPECTOR GENERAL
Subactivity: OFFICE OF AUDITS
Program Change: TECHNICAL ASSISTANCE

Title:	Grade	Number	Annual Salary	Total Salaries
ecialist (4 Part-time temporary)	14	1	52,104	52,104
Total		1		52,104
Less lapse (0%)		0		0
Total full-time permanent		1		52,104

Personnel Data	Number
Full-Time Equivalent Employment:	
Full-time permanent	0
Other than full-time permanent	1
Total	1
Authorized Positions:	
Full-time permanent	0
Other than full-time permanent	
Total	0

Department of Commerce
General Administration
Office of the Inspector General
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Activity: Reimbursable Program

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Subactivity: Reimbursable Program	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	$0	0	$330	0	$330	0	$330	0	0
TOTAL	Pos./BA	0		0		0		0		0	
	FTE/Obl.	0	0	0	330	0	330	0	330	0	0

Goals and Objectives

GOALS: To provide a centralized source of funding for special tasks and functions of a non-permanent nature.

OBJECTIVES: To facilitate charging individual bureaus for certain "outside audits" conducted by other agencies.

Base Program FY 1990

Activities in the program include such functions as: outside audits and award payments to employees who disclose fraud, waste, and mismanagement.

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	8,816	8,987	171
11.3	Other than full-time permanent	19	71	52
11.5	Other personnel compensation	120	120	0
11.9	Total personnel compensation	8,955	9,178	223
12.1	Civilian personnel Benefits	1,607	1,654	47
21	Travel and transportation of persons	757	880	123
22	Transportation of things	4	4	0
23.1	Rental payments to GSA	1,073	1,096	23
23.3	Commun., util., misc. charges	245	253	8
24	Printing and reproduction	26	33	7
25	Other services	1,407	1,856	449
26	Supplies and materials	65	78	13
31	Equipment	69	83	14
99	Total, Direct Obligations	14,208	15,115	907
	Reimbursable Obligations	330	330	0
	TOTAL OBLIGATIONS	14,538	15,445	907

Department of Commerce
General Administration
Office of the Inspector General
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1991 Base	1991 Estimate	Increase/ (Decrease)
Personnel Data			
Full-Time Equivalent Employment:			
Full-time permanent	196	200	4
Other than full-time permanent	1	2	1
Subtotal, Direct	197	202	5
Reimbursable	0	0	0
Total	197	202	5
Authorized Positions:			
Full-time permanent	208	213	5
Other than full-time permanent	1	1	0
Subtotal, Direct	209	214	5
Reimbursable	0	0	0
Total	209	214	5

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level	$87	$87	$0
Senior executive service	490	490	0
General schedule	8,239	8,410	171
Subtotal	8,816	8,987	171
11.3 Other than full-time permanent			
General schedule	19	71	52
Subtotal	19	71	52
11.5 Other personnel compensation			
Overtime	7	7	0
SES performance awards	15	15	0
Cash awards	26	26	0
PMRS awards	72	72	0
Other	0	0	0
Subtotal	120	120	0
11.9 Total personnel compensation	8,955	9,178	223

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
12.1 Civilian personnel benefits			
Civil service retirement	367	382	15
Federal employees' retirement	419	436	17
Thrift savings plan	75	78	3
Federal insurance contribution act	185	190	5
Health insurance	478	483	5
Life insurance	25	27	2
Employees' compensation fund	58	58	0
Other	0	0	0
Subtotal	1,607	1,654	47
21 Travel and transportation of persons			
Common carrier	327	376	49
Mileage	18	22	4
Per diem/actual	376	443	67
Vehicular	32	34	2
Other	4	5	1
Subtotal	757	880	123
22 Transportation of things	4	4	0
23.1 Rental payments to GSA	1,073	1,096	23

OPENING STATEMENT

Mr. **DWYER**. Here to testify in support of this request is Frank DeGeorge. Inspector General of the Department. Mr. DeGeorge, proceed with your statement.

Mr. **DEGEORGE**. Thank you, Mr. Chairman.

First, if I might, I would like to introduce my deputy, Mike Zimmerman. Mike has just recently come on board from GAO. He has seen the error of his ways and decided to join us.

I will paraphrase parts of the statement, Mr. Chairman, to save some time, but basically our request is for $15,115,000, which reflects an increase of $1,784,000. This includes adjustments to base of $877,000 and a program increase of $907,000. The additional program funds are needed primarily to provide additional technical assistance capability for program and systems audits and to expand our inspections of the U.S. and Foreign Commercial Service's field operations as directed by the Omnibus Trade and Competitiveness Act of 1988.

Our work is steadily evolving, and over the last few years has materially changed. I would like to review some of these changes.

We have worked closely with the Department's agency officers in our financial audits of direct loans and loan guarantees, particularly the Economic Development Administration. Agency officials have not only concurred with the results, but have actively sought our assistance in evaluating borrower financial transactions and bank performance. We have taken a much tougher stance against banks that do not properly perform their fiduciary responsibilities.

In almost every instance where we recommended termination of a guarantee, the agency has agreed. In February 1989, the Supreme Court upheld the Department's right to terminate such guarantees when conditions warrant such action.

Most recently, in February 1990, a U.S. District Court in Arkansas rejected a bank's claim against the Economic Development Administration for another $2.8 million payment under its guarantee agreement because the bank did not properly monitor the borrower's performance. As a result, EDA will not now pay the $2.8 million sought by the bank. The lawsuit was filed in response to our audit recommendation that EDA not honor the bank's demand for payment.

Savings from other guarantee audits have also been substantial. In 1989 alone, $16 million was saved as a result of our recommendations.

Our systems audit approach continues to be useful to the agencies and the Department. These reviews have included the source evaluation process for the National Weather Service's next-generation radar, and the Patent and Trademark Office's automated patent and trademark systems, and many others. The savings have been significant. Our audit of NOAA's procurement of next-generation weather satellites found that an estimated $80 million in long-term costs could be avoided by careful planning now.

We have shifted our management audit strategy to more comprehensive reviews of major department programs. Because we are a diverse department with many large operating agencies, such as the Census Bureau, Patent and Trademark Office, National Institute of Standards and Technology, and the National Oceanographic and Atmospheric Administration, we have begun to look at staff utilization in detail. The early results have been useful. We have identified savings that can be achieved in Boulder, Colorado, by consolidating the administrative functions.

We have also strengthened our review of the Department's procurement activities. We continue to closely monitor large contracts issued by Commerce agencies. Because of our evaluation of NOAA's procurement of a wide-area network to replace its current systems, for example, we believe that we have expedited systems replacement by at least a year and saved $1.4 million.

Since we started our inspection program, we have completed over 220 inspections. Many of these offices had never been audited, due to their size, during our normal management audits. The inspection program, however, enables us to have a more visible and effective presence throughout the Department, both here in the United States and overseas.

During Fiscal Year 1989, our investigative operations resulted in 102 indictments, convictions, or administrative actions, primarily against employees. One of our investigations, in cooperation with the FBI and U.S. Customs, resulted in the prosecution of an export licensing officer who was convicted of extortion and soliciting bribes in exchange for improperly authorizing shipments of electronics. If I might add, he just simply decided that he wanted to be in business for himself, and he charged a 5 percent commission.

We believe that the revised emphasis for our audits and inspections and the rejuvenation of our investigative operations has resulted in beneficial changes in the way the Department conducts its business. With a staff of 200 which the budget suggests, we plan to conduct 48 major management audits, 100 financial audits, 35 inspections, and 220 investigations. I believe we can and should do more. By acquiring the technical assistance capabilities referred to in our budget justification, we will do more.

The need for technical help may not be obvious to the committee. The Federal Government is simply not competitive with its present salary structure, particularly in the technical and auditing areas. We are simply unable to hire sufficient numbers of qualified and experienced computer analysts, auditors, and engineers. We are even less competitive when we need mid-range technical help on the GS–13 through GS–15 level.

In addition, our needs are not always continuous. We may need a senior meteorologist or architect for only a 3-month period as we review a weather service facility, or a senior economist for only 6 months as we review the GNP calculations, which is an audit we are presently conducting. In these cases it is more logical to have help in an as-needed basis. This is what we plan to do.

I would be glad to answer any questions, Mr. Chairman.

[The statement of Mr. DeGeorge follows:]

STATEMENT BY

FRANK DEGEORGE
INSPECTOR GENERAL
U.S. DEPARTMENT OF COMMERCE

BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE,
JUSTICE, AND STATE, THE JUDICIARY AND RELATED AGENCIES

MARCH 6, 1990

Mr. Chairman and members of the subcommittee, I am pleased to appear before you today in support of the fiscal year 1991 budget request of the Office of Inspector General.

Our request for $15,115,000 reflects an increase of $1,784,000. This includes adjustments to base of $877,000 and a program increase of $907,000. The additional program funds are needed primarily to provide additional technical assistance capability for program and system audits and to expand our inspections of the U.S. and Foreign Commercial Service's field operations, as directed by the Omnibus Trade and Competitiveness Act of 1988.

Our work is steadily evolving, and over the last few years has materially changed. I would like to review some of these changes.

We have worked closely with the Department's agency officials in our financial audits of direct loans and loan guarantees. Agency officials have not only concurred with the results but have actively sought our assistance in evaluating borrower financial transactions and bank performance. We have taken a much tougher stance against banks that do not properly perform their fiduciary responsibilities. In almost every instance where we recommended termination of a guarantee, the agency has agreed. In February 1989 the Supreme Court upheld the Department's right to terminate such guarantees when conditions warrant such action. More recently, in February 1990 a U.S. District Court in Arkansas rejected a bank's claim against the Economic Development Administration for a $2.8 million payment under its guaranty agreement because the bank did not properly monitor the borrower's performance. As a result, EDA will not pay the $2.8 million sought by the bank. The lawsuit was filed in response to our audit recommendation that EDA not honor the bank's demand for payment. Savings from other guarantee audits have also been substantial. For example, in FY 89 alone, $16 million was saved as a result of our recommendations that six guaranty agreements be terminated.

Our systems audit approach continues to be useful to the agencies and the Department. These reviews have included the source evaluation process for the National Weather Service's next-generation weather radar system and the Patent and Trademark Office's automated patent and trademark systems and many others. The savings have been significant. Our audit of NOAA's procurement of next-generation weather satellites found that an estimated $80.6 million in long-term costs could be avoided by careful planning now.

We have shifted our management audit strategy to more comprehensive reviews of major departmental programs. Because we are a diverse department with many large operating agencies, such as the Census Bureau, Patent and Trademark Office, National Institute of Standards and Technology, and the National Oceanic and Atmospheric Administration, we have begun to look at staff utilization in detail. The early results have been useful. We identified significant savings that can be achieved in Boulder, Colorado, by consolidating the administrative functions now performed by a number of Commerce agencies.

We have also strengthened our review of the Department's procurement activities. We continue to closely monitor large contracts issued by Commerce agencies. Because of our evaluation of NOAA's procurement of a wide-area network to replace its current systems, we believe that we expedited the systems replacement by at least a year and saved about $1.4 million.

Since we started our inspection program, we have completed over 220 inspections. Many of these offices might never have been audited, due to their size, during our normal management audits. The inspection program however enables us to have a more visible and effective presence throughout the Department, both here in the United States and overseas, maximizing our use of a very small staff.

During FY 89, our investigative operations resulted in 102 indictments, convictions, or administrative actions. One of our investigations, in cooperation with the FBI and U.S. Customs Service, resulted in the prosecution of an export licensing officer who was convicted of extortion and soliciting bribes in exchange for improperly authorizing shipments of electronics equipment to China.

We believe that the revised emphasis for our audits and inspections and the rejuvenation of our investigative operations has resulted in beneficial changes in the way the Department conducts its business. With a staff of 200, we plan to conduct 48 major management audits, 100 financial audits, 35 inspections, and 220 investigations. However, I believe that we can, and should, do more. By acquiring the technical assistance capabilities referred to in our budget justification we will do better.

The need for technical help may not be obvious to the committee. The Federal Government is not competitive with its present salary structure, particularly in the technical and auditing areas. We are simply unable to hire sufficient numbers of qualified and experienced computer analysts, auditors, and engineers. We are even less competitive when we need mid-range technical help at the GS-13 through GS-15 level. In addition, our needs are not always continuous--we may need a senior meteorologist or architect for only a three-month period as we review a weather service facility or a senior economist for only six months as we review the GNP calculations. In these cases, it is more logical to have help on an as-needed basis. This is what we plan to do.

I will be pleased to answer any questions.

EXPORT LICENSING OFFICER

Mr. **Dwyer**. Thank you, Mr. DeGeorge.

I was reading your comment on that export licensing officer. Did he arrange for the exportation of electronics equipment that did not have the Department of Defense authorization?

Mr. **DeGeorge**. Yes.

Mr. **Dwyer**. That is pretty serious.

Mr. **DeGeorge**. Yes, it is. He is now in jail for 5 years.

Mr. **Dwyer**. Five years? Well——

Mr. **DeGeorge**. And a $100,000 fine, and we are also going after him civilly. He circumvented the whole process and forged signatures. He decided he wanted to take 5 percent off the top.

Mr. **Dwyer**. That is a good accomplishment on your part.

Mr. **DeGeorge**. The Export Administration has moved substantively in the last year to improve their process and I think that if you will talk to Mr. Kloske and his staff this afternoon, you will see that they have taken the steps we feel are adequate to deal with the issue. We did clearly have some problems. He thought it was nice to be in business for himself.

FY 1990 SEQUESTER

Mr. **Dwyer**. How much of your budget was sequestered during Fiscal Year 1990, and what impact did the reduction have on your activities?

Mr. **DeGeorge**. What was sequestered was $169,000 from a $13.5 million budget. I doubt if it did much harm, except in the travel area. When we get down toward the end of the year, there always seems to be some need for travel money in audits. An auditor without travel money is useless, to be sitting in a district office somewhere, so it did hurt us a little bit in completing some of our work, particularly in the Weather Service area, but we managed.

FY 1991 OMB REQUEST

Mr. **Dwyer**. How about your budget request to OMB? Did OMB eliminate any of the items requested?

Mr. **DeGeorge**. No. Actually they increased it, sir.

Mr. **Dwyer**. They increased it?

Mr. **DeGeorge**. Yes, sir, in minor amounts.

Mr. **Dwyer**. Roof leaking?

Mr. **DeGeorge**. Sir?

Mr. **Dwyer**. Was the roof leaking? [Laughter.]

Mr. **DeGeorge**. That may be the reason they have me on the seventh floor. [Laughter.]

Mr. **Dwyer**. You are the first ones who have come before us and said that the OMB increased your request.

Mr. **DeGeorge**. It was a minor amount. They were probably rounding, but they did increase it.

Mr. **Dwyer**. Mr. Kolbe?

Mr. **Kolbe**. Mr. Chairman, I have no questions at this time, but I will submit some for the record.

Mr. **Dwyer**. Thank you. We are going to quit while we are all ahead. We will have a question or two for you.

Mr. **DeGeorge**. That doesn't mean we don't need this amount, sir.

Mr. **Dwyer**. I understand that, but you understand the predicament we are in.

Mr. **DeGeorge**. I understand, sir.

Mr. **Dwyer**. Just read our lips. We have a problem.

We will have some questions we will send to you, and you may provide the answers for the record.

Mr. **DeGeorge**. Sure.

Mr. **Dwyer**. Okay. Thank you.

[The following questions were submitted to be answered for the record:]

Depar[illegible]f Commerce
Genera[illegible]inistration
Office of the Inspector General

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
23.3	Communications, utilities and miscellaneous charges	0	0	0
	Rental of ADP equipment	1	1	0
	Rental of office copying equipment	1	1	0
	Other equipment rental	6	6	0
	Federal telecommunications system	66	72	6
	Other telecommunications services	128	128	0
	Postal Service by USPS	42	44	2
	Other	1	1	0
	Subtotal	245	253	8
24	Printing and reproduction			
	Publications	15	15	0
	Other	11	18	7
	Subtotal	26	33	7
25	Other services			
	Training:			
	University	1	1	0
	Office of personnel management	2	2	0
	Other	57	57	0
	Maintenance of equipment	40	40	0
	GSA reimbursable services	50	50	0
	ADP services	2	2	0
	Telecommunications services	3	3	0
	Payments to GA, WCF	999	999	0
	Other Federal Agencies	228	228	0
	Other	25	474	449
	Subtotal	1,407	1,856	449

Department of Commerce
General Administration
Office of the Inspector General
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
26	Supplies and materials			
	Office supplies	47	60	13
	ADP supplies	5	5	0
	Other	13	13	0
	Subtotal	65	78	13
31	Equipment			
	Office machines and equipment	32	46	14
	ADP hardware	25	25	0
	ADP software	5	5	0
	Other	7	7	0
	Subtotal	69	83	14
99	Subtotal, Direct Obligations	14,208	15,115	907
	Reimbursable Obligations	330	330	0
	TOTAL OBLIGATIONS	$14,538	$15,445	$907

Questions Submitted by Congressman Smith

Office of Inspections and Resource Management

QUESTION:

You are requesting an increase of $390,000 and five positions to expand inspections of U.S. and Foreign Commercial Service field operations. You made this request in the FY 1990 budget and because of the overall budget situation, the Committee was not able to approve it. What were the consequences of not having these resources in FY 1990?

ANSWER:

We have diverted staff and resources from other important activities to provide minimal coverage of the U.S. and Foreign Commercial Service (US&FCS) field offices. Unfortunately, diverting these resources has delayed our work on other crucial aspects of the Department's operations. However, without jeopardizing other crucial OIG operations, we cannot divert further resources to conduct the 24 USFCS inspections we believe are required to adequately meet the intent of the Omnibus Trade and Competitiveness Act of 1988.

QUESTION:

Would these resources be allocated to activities abroad or to field offices in the U.S.?

ANSWER:

About 33 percent would be allocated to inspections of domestic offices and 67 percent to foreign offices.

Office of Audits

QUESTION:

You are requesting a program increase of $517,000 to improve the quality and timeliness of audits by hiring part-time and temporary staff. What are the current deficiencies in the quality and timeliness of such audits?

ANSWER:

The question suggests that the audits we now do are deficient and untimely. This is not the case. The audits we conduct are performed in a timely manner and meet the audit quality standards. What is deficient, however, is our ability to examine many of the Department's scientific and economic activities including some of its more sophisticated and costly automated systems. We need additional technical expertise on our staff to evaluate these very sophisticated and large systems.

QUESTION:

Is it more efficient to hire part-time and temporary staff to address this problem rather that full time auditors?

ANSWER:

Yes, it is. We may need a meteorologist or architect for only a short period as we review a weather service facility or a senior economist for only six months as we review the GNP calculations. Since these needs are so varied and generally for limited periods, it would be better to obtain this assistance through contracts and temporary employees.

Questions Submitted by Congressman Rogers

NOAA Weather Satellites

QUESTION:

In your prepared statement, you state that an audit of NOAA's next generation weather satellites procurement found an estimated $80.6 million in long-term costs could be avoided by careful planning now.

Would you provide for the record details which support that statement, including a breakout of the $80. 6 million and to which contracts these savings would apply? How does this compare with the most recent estimates of the satellite and launch costs?

ANSWER:

NOAA is procuring, through NASA, five newly designed satellites (GOES-Next), and associated launch services and ground systems to replace its current geostationary satellite system. In 1989, we recommended that NOAA ask NASA to renegotiate the GOES-Next launch services contract to extend the launch schedule so satellites can be launched when needed, rather than on a compressed schedule. Launching satellites when needed will allow NOAA to maintain spare satellites on the ground rather than in orbit. An orbiting spare satellite wastes about one month of its operational life every two months.

A breakdown of the savings follows :

$1,230,083,392	Total cost for the GOES-NEXT project
/ 280	Number of service months from five satellites
$ 4,393,155	Cost per month of GOES-Next service
x 38	Number of service months that would be wasted with a compressed launch schedule (280 service months from an extended schedule less 242 service months from a compressed schedule)
$ 166,939,890	Gross savings
- 86,303,168	Cost to extend the launch schedule
$ 80,636,722	Net savings

Satellite project cost increases now total about $372 million. We believe the total will increase further when NASA releases its next costs estimate later this month. The savings from extending the life of the GOES-Next series will be obtained by delaying and reducing the need for satellites to follow GOES-Next. The contracts to develop follow-on satellites and provide launches have not yet been awarded by the Department.

Questions Submitted by Congressman Kolbe

Minority Business Development Administration Audits

QUESTION:

Currently, the I.G. is conducting an audit of the operations of the Minority Business Development Center in Los Angeles. I have an interest in this because the group that runs this center also runs the center in Tucson, in my district.

What leads to such an audit by the IG? Are you only brought in after problems are detected by the MBDA?

ANSWER:

The IG's decision to undertake an audit is an independent decision. These decisions are based on our experience and independent reviews of ongoing operations as well as indications from agency personnel or others. In this specific case, there were indications of financial and performance problems.

QUESTION:

I understand in this case the MBDA had given the center favorable reviews. Is there a discrepancy between the reviews and the audit findings? What might account for this?

ANSWER:

This is the reason that the Congress established Offices of Inspector General--agencies cannot perform in-depth reviews that the Congress expects of OIG auditors and investigators.

MBDA performed quarterly desk reviews at its regional office of the Center's performance claims. Also, MBDA's site visits regularly produce recommendations to improve client files to ensure that secured actions were properly documented. During these reviews and visits, MBDA found discrepancies in the Center's performance claims which were corroborated by the audit. Our audit, however, found several additional problems which only could be detected through a comprehensive audit.

QUESTION:

What is the status of the on-going audit? How long will the process continue?

ANSWER:

The audit fieldwork is complete, and in February the OIG issued a draft audit report to the recipient for comment. The recipient received a 30-day extension on the comment period. The recipient's comments are now due April 10, 1990.

Upon receipt of the auditee's written comments, the OIG will evaluate the comments and make any report revisions appropriate before issuing the final audit report. Once the final audit report is issued to MBDA and the recipient, the audit will follow the Department of Commerce audit resolution procedures. The auditee will have another 30 days to respond to the final report. The Department and the OIG have six months from the date of the final report to resolve the audit and issue the Audit Resolution Determination to the recipient.

QUESTION:

Is it likely other centers run by the foundation will also be audited? What effects will this have on the operations of the other centers run by the foundation?

ANSWER:

The OIG has no plans to audit either the Tucson or San Diego Centers at this time. There are no immediate indications that problems of this magnitude exist at either location.

Regarding the effects of this audit report on the operations of the other centers, this report is in draft and a final Departmental position on this matter will not be taken until the Department receives the auditee's comments to the final report. Since the Department has not made a final decision, it is difficult and inappropriate to speculate what the effects would be on the other centers.

QUESTION:

When problems are detected by the IG through audit, what options are available in terms of a remedy for the IG?

ANSWER:

First, the Office of Inspector General only makes recommendations. It does not have implementing authority. The OIG evaluates the facts of each case and the seriousness of the problems found. The OIG has the option of recommending remedies available to the Department under law to the funding agency, to the Department, or to any other Governmental agency, including the Department of Justice. The Inspector General Act established the OIG to look into all aspects of Departmental operations including grants and contracts, and whether problems identified lead to criminal, civil, or administrative remedies.

TUESDAY, MARCH 6, 1990.

MINORITY BUSINESS DEVELOPMENT AGENCY

WITNESSES

KENNETH BOLTON, DIRECTOR

RAPHAEL FRANCHI, DEPUTY DIRECTOR

WILLIAM OGDEN, CHIEF COUNSEL

GEORGE PARISH, ADMINISTRATIVE OFFICER

HAROLYN BOULWARE, BUDGET OFFICER

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING, AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER [presiding]. The next item that we shall consider is the Fiscal Year 1991 budget request for the Minority Business Development Agency. The request is for $46,161,000, and this amount is an increase of $6,420,000 above the appropriation for Fiscal Year 1990. We shall insert the budget justifications submitted in support of this request into the record at this point.

[The justifications follow:]

Department of Commerce
Minority Business Development Agency
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CONGRESSIONAL SUBMISSION
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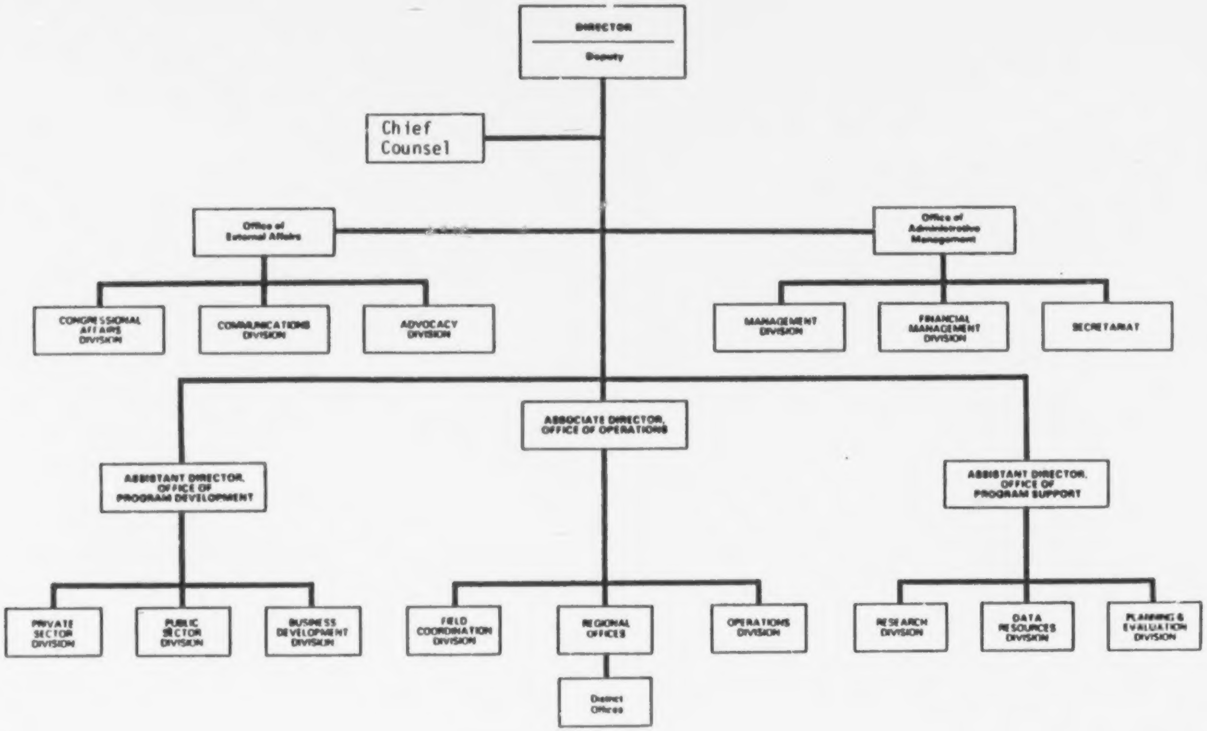
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REGIONAL OFFICES
District Offices
OPERATIONS DIVISION
RESEARCH DIVISION
DATA RESOURCES DIVISION
PLANNING & EVALUATION DIVISION

Department of Commerce
Minority Business Development Agency

GENERAL STATEMENT

The Minority Business Development Agency's (MBDA) 1991 Budget supports the Department of Commerce goals of increased productivity, trade expansion, and information dissemination to meet the public's needs. It also fulfills the President's commitment to reinvigorate Federal minority business development efforts. It does this by expanding and redirecting the present activities of MBDA and by once again fully asserting its responsibility for coordinating and influencing policies of the Federal Government which have an impact on minority business development.

Prior to the development of the 1991 budget, plans were developed for redirecting the MBDA programs to eliminate duplication and inefficiency. This budget plan reflects an extensive effort to realign the projects and programs of MBDA. The Department has assisted MBDA in the effort. Also, we have adopted a strategy which relies more heavily on the private sector and on state and local participation for assistance to MBEs. The administrative practices of MBDA for awarding cooperative agreements to the network of MBDCs are inefficient and time consuming and are being streamlined to eliminate duplication of effort in the Regional Offices and Headquarters.

Strong minority entrepreneurial participation in the economy will directly increase the number of jobs and economic output, while reducing social welfare spending and the Federal deficit, thus increasing the economic wealth and overall benefit to the nation. The creation of this entrepreneurial initiative is especially critical to the economic revitalization of America's inner cities.

Organizational Development and Realignment will address the need for: streamlining agency processes, reducing duplication of effort in MBDA grants processing activities, restructuring programs and, realigning resources in 1989 and 1990. Included in this major component is enhanced organizational productivity through reorientation and training which will be completed in 1991.

The following is a comparision of the FY 1990 enacted amount with the FY 1991 estimates and related data on current employment for this program within the Department of Commerce.

(Dollar Amounts in Thousands)

	Appropriation Currently Available		1991 Estimate		Increase/(Decrease)		Perm.
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Emp. 12/31/89
Enterprise Dev..........	155	$34,313	155	$38,710	0	$4,397	131
Resource Dev............	27	3,016	33	3,683	6	667	23
Advocacy, Research and Information...........	34	2,412	36	3,768	2	1,356	29
Total Requirements....	216	$39,741	224	$46,161	8	$6,420	193

Enterprise Development

The Minority Business Development Center (MBDC) program is the core network of MBDA's assistance to the nation's minority business community. The goal of the centers is to provide a selection of affordable, quality services to assist minority businesses with their varying needs at different stages of development. These services include management and technical assistance (M&TA), assistance in preparing business plans, packaging loans, assistance with marketing and marketing research, procuring contracts, and obtaining information and making referrals.

The centers will be streamlined and upgraded to increase the quality and kinds of services and to provide a more flexible program structure to meet local needs. The new program will be market driven to reflect local commercial and economic phenomena and potential minority business enterprise (MBE) market share. Certain reporting requirement standards will be simplified. It will be flexible and yet more specialized to fully meet local MBE business development needs. More emphasis will be given to the centers' involvement with community organizations in order to fully leverage their resources.

Resource Development

Resource Development is comprised of Public and Private Sector activities. Resource Development activities focus on market, management and capital development are designed to provide access to opportunities and promote business development.

Public Sector

MBDA will more fully implement Section 1 of Executive Order 12432 and Section 1 of Executive Order 11625 which call for the participation, monitoring and review by MBDA of the annual goals set by the Federal agencies for minority business participation. In the past, other activities, such as state and local programs, were curtailed. Reactivation of Executive Order 12432 and the state and local program is essential to ensuring the achievement of the President's annual goal for minority business.

On the Federal level, MBDA will work closely with Federal agencies in setting their annual goals for minority business, and in monitoring and evaluating their annual performance. Renewed efforts will also be undertaken to increase the number of interagency agreements whereby funds will be transferred from other Federal agencies to MBDA to be allocated for minority business development programs, such as the case with the transfer of $258,677 ('89-'90) from the Air Force and $175,000 ('89-'90) from HHS. Other interagency agreements, such as with DOT, EPA, SBA and AID, call for the joint utilization of resources to further the respective minority business objectives of both Agencies.

MBDA will re-establish Minority Business Opportunity Committees (MBOCs), and State and Local (S&L) programs to fully reflect the changes that have occurred in recent years in the increased level of activity being undertaken by state and local governments in the area of minority business. The focus will be on forming strategic intergovernmental programs to allow MBDA's participation to complement and leverage, and not duplicate, present programs already in place. MBDA will fund the appropriate entities for the MBOC program and reinstate the funding of local, regional and national organizations and public interest groups to support outreach to minority businesses.

Private Sector

In the past, the Private Sector activities have focused narrowly on two major organizations which MBDA has funded for a number of years. Presently, there are no program initiatives or mechanisms for a direct working relationship with Corporate America or other private sector entities except on limited project basis. MBDA believes that, by undertaking a strong leadership role and by being a catalyst, strong public/private partnerships can be forged between Corporate America and the minority business community, as well as with other private entities and organizations. MBDA will be able to undertake this leadership role after the reinvigoration process called for by President Bush has established the visibility, the credibility and the image of MBDA as the primary voice for the Federal Government on policy issues relating to minority business.

New and expanded initiatives will include:

Capital Development - will address a key issue, because lack of access to capital is a major deterrent faced by minority businesses at every stage of their development. New programs must be undertaken with financial institutions, other types of corporations as well as nonprofit organizations.

Franchise/Distributorship Development - will assist minorities to become entrepreneurs through franchise ownership, distributorships and entry into other high-growth industries which offer a multitude of choices and benefits for both the entrepreneur, and the community in which the business operates.

Advocacy, Research & Information

At the Federal level, MBDA is responsible for the development of advocacy, promotional and outreach activities on behalf of minority-owned businesses to improve the image and highlight the positive benefits of doing business with minority-owned firms. In addition to informing the public about the capabilities of the minority business community, MBDA outreach activities identify minority-owned firms that can provide the supplies and services needed by corporations and public organizations who are ready to contract with these entrepreneurs. Statistical and analytical research activities are required for proper public policy formation. This policy formation is an inherently governmental activity for which MBDA will take the lead role within the Federal government for planning, coordinating and reporting on minority business development programs. This informational program will obtain and disseminate timely business information and strategies that are vital for the growth and longevity of minority-owned businesses.

Advocacy is an essential activity of the Agency and is a focal point for the redirection effort. The goal of the Advocacy activity is to make MBDA the government's lead advocate, creating a more positive environment for minority-owned businesses within the public and private sectors and assisting in improving access to opportunity. Advocacy also informs the minority business community about MBDA programs and other available resources and works to improve the recognition of minority business as vital for a strong American economy. The major Advocacy initiative has been the establishment and installation of the Advisory Council on Minority Business Enterprise to advise the Secretary of Commerce. This important group will aid in structuring and advising on key areas of MBDA involvement. This council of advisors is composed of 25 top corporate, educational, civic and former government officials and was established under the Federal Advisory Committee Act.

An outstanding example of current MBDA Advocacy activity is the planning and development of the annual National MED Week Observance, proclaimed yearly by the President of the United States and observed during the first week of October. This event is held to highlight the accomplishments of outstanding minority entrepreneurs who have excelled in their chosen fields of business. The National celebration also provides a trade fair where minority vendors can display their products and services before government and private sector procurement and purchasing officials.

Resources for the Research program will be increased to improve the Agency's ability to formulate policy, to accurately understand what the private and public sectors are doing for minority-owned business, and determine the needs of minority-owned firms. The first year of the MBDA reinvigoration process has disclosed a need to obtain information and research about the relative level of minority business participation. Research is also needed in order to steer minority-owned firms to markets that are more suited to their capabilities. This budget includes increases for Research activities to improve the MBDA knowledge base for establishing national policy, and research studies to identify high-growth markets and how minority businesses can enter and survive in these markets. Also, with completion of the 1990 Census, there will be new opportunities for a comprehensive data base of research information about the status of minority business enterprises.

The MBDA Information program serves to close the information gap that separates minority-owned businesses from the business information they need but can not easily obtain without assistance from MBDA. This includes data and information needed for business transactions, marketing development, business development, and business decision-making. It is predicted that society will become even more dependent on information in the last decade of the twentieth century. By using modern technology and telecommunications capability, MBDA can enable minority-owned businesses to tap into relevant business information and have it available on-line for the purpose of decision-making. This includes providing to potential minority entrepreneurs and established minority-owned businesses with whatever information they need for establishing, developing, and expanding their businesses. For this purpose the agency manages Business Information Systems (BIS) and contracts with private commercial information vendor(s) to provide remote on-line interactive access between MBDCs located throughout the nation to the BIS computer data bases of economic and marketing data, construction and marketing opportunities. At each MBDC, business development specialists assist MBDC clients in meeting their need for information.

This budget request includes increases to reinvigorate the Information program by establishing the Minority Business Enterprise Information Center (MBEIC) as required by Executive Order 11625. The Center will serve as a Clearinghouse for disseminating information for and about minority-owned businesses. The MBEIC will provide information directly to minority-owned businesses and the general public who may be interested in purchasing from minorities. In FY 1991, as a result of the planned increased level of MBDA activity, the MBEIC is expected to respond to an increased number of requests - from purchasing officials in the private sector, Federal agencies, and State and local governments - to locate minority vendor suppliers and contractors on file in the MBDA PROFILE system.

De-emphasis on MBDC Quantitative Goals and Improved Reporting Requirements

MBDA will streamline and upgrade the MBDC program including reductions to administrative paperwork and the disproportionate amount of time currently required for obtaining an MBDC award.

The objective of this effort is to reduce the focus on having funded organizations meet quantitative goals to the detriment of other needed national minority business development activities. MBDA plans to examine and evaluate the existing performance criteria for the purpose of developing methodology for matching the performance goals to the economic conditions and market environment of the MBDC locale. This process could well mean changes in the present goals as well as additional performance measures. Furthermore, increased consideration will be given to the quarterly narrative reports in the refunding decision.

During FY 1988, MBDA completely revised the entire Business Development Reporting (BDR) forms and instructions for the specific purpose of reducing reporting burdens by eliminating unnecessary data elements, clarifying the instructions, and revising the formats of the forms.

Also during FY 1988, it was suggested that MBDA should consider reducing reporting frequency from quarterly to semiannually for MBDCs performing the second and third years of three-year cooperative agreements. Upon evaluation, it was decided that MBDA still needs the third-quarter report as a tool for making refunding decisions. However, MBDCs will not be required to submit reports for their first quarter of operation during each of the three years of performance. This reduces the frequency from quarterly to three times per year and will affect all MBDCs, even those in their first year of operation.

The Need to Reinstate MBDA's funded State and Local (S&L) Program

Traditionally, MBDA has provided assistance to S&L agencies by funding programs that offer procurement and financial assistance to minority constituents. Although these S&L programs have been very successful in the past, funding for this program was eliminated in 1988, based on an earlier (1986) OIG Report which suggested MBDA could fold this program into the BDCs. MBDA believes such an arrangement would preclude a vitally important structured relationship with S&Ls, and their minority business offices. MBDCs have very little or no input to S&L policy making, and would not necessarily understand the complex requirements of the S&L procurement process. MBDA strongly believes there is an urgent need to establish a new S&L Program to provide the federal coordination and leadership, as called for under E.O. 11625. This role is all the more important in light of the recent Richmond v. Croson decision. MBDA's new program will fund national organizations to facilitate networking at state and local levels, thus identifying outreach, contracting procurement and financial assistance opportunities.

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page. No.			Personnel	Amount	Personnel	Amount
	Appropriation currently available, 1990	Pos./BA			216	39,741
		FTE/Obl.			207	44,450
MBDA-11	FY 1991 Adjustments to base:					
	Adjustment for 1990 pay increase and related costs			348		
	Other cost changes			460		
	Subtotal, adjustments to base:				0	808
	1991 Base	Pos./BA			216	40,549
		FTE/Obl.			207	40,549

Page. No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
MBDA-17	Enterprise Development:											
	Business Development	Pos./BA	155	34,407	155	34,313	155	34,936	155	38,710	0	3,774
		FTE/Obl.	147	33,809	149	36,331	149	34,936	149	38,710	0	3,774
	Subtotal, Enterprise Dev.	Pos./BA	155	34,407	155	34,313	155	34,936	155	38,710	0	3,774
		FTE/Obl.	147	33,809	149	36,331	149	34,936	149	38,710	0	3,774
MBDA-23	Resource Development:											
	Public Sector	Pos./BA	13	1,186	13	1,215	13	1,256	15	1,453	2	197
		FTE/Obl.	12	872	12	2,059	12	1,256	13	1,453	1	197
	Private Sector	Pos./BA	14	1,766	14	1,801	14	1,850	18	2,230	4	380
		FTE/Obl.	13	2,146	13	3,426	13	1,850	16	2,230	3	380
	Subtotal, Resource Dev.	Pos./BA	27	2,952	27	3,016	27	3,106	33	3,683	6	577
		FTE/Obl.	25	3,018	25	5,485	25	3,106	29	3,683	4	577

Page. No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
MBDA-36	Advocacy, Research & Info:											
	Advocacy..................	Pos./BA	7	376	7	391	7	413	7	513	0	100
		FTE/Obl.	7	375	7	391	7	413	7	513	0	100
	Research..................	Pos./BA	8	1,051	8	1,070	8	1,098	8	1,613	0	515
		FTE/Obl.	8	1,129	8	1,292	8	1,098	8	1,613	0	515
	Information Clear.........	Pos./BA	19	919	19	951	19	996	21	1,642	2	646
		FTE/Obl.	18	788	18	951	18	996	20	1,642	2	646
	Subtotal, Advocacy, Research & Information Clear.......	Pos./BA	34	2,346	34	2,412	34	2,507	36	3,768	2	1,261
		FTE/Obl.	33	2,292	33	2,634	33	2,507	35	3,768	2	1,261
	TOTAL	Pos./BA	216	39,705	216	39,741	216	40,549	224	46,161	8	5,612
		FTE/Obl.	205	39,119	207	44,450	207	40,549	213	46,161	6	5,612

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by activity:	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Enterprise Development:										
Business Development.... Pos./BA	0	0	0	100	0	100	0	100	0	0
Subtotal, Enterprise Dev.. Pos./BA	0	0	0	100	0	100	0	100	0	0
Resource Development:										
Public Sector........... Pos./BA	0	0	0	0	0	0	0	0	0	0
Private Sector.......... Pos./BA	0	259	0	500	0	500	0	500	0	0
Subtotoal, Resource Dev... Pos./BA	0	259	0	500	0	500	0	500	0	0
Advocacy, Research & Information:										
Advocacy................ Pos./BA	0	0	0	0	0	0	0	0	0	0
Research................ Pos./BA	0	0	0	0	0	0	0	0	0	0
Information Mgmt........ Pos./BA	0	0	0	0	0	0	0	0	0	0
Subtotal, Advocacy, Research & Information........... Pos./BA	0	0	0	0	0	0	0	0	0	0
TOTAL Pos./BA	0	259	0	600	0	600	0	600	0	0

Department of Commerce
Minority Business Development Agency
Minority Business Development

SUMMARY OF FINANCING

(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	39,377	45,050	41,149	46,761	5,612
Financing:					
Offsetting collections from:					
Federal funds	(259)	(600)	(600)	(600)	0
Trust funds	0	0	0	0	0
Non-Federal sources	0	0	0	0	0
Recoveries	(1,613)	0	0	0	0
Unobligated balance, start of year	(2,609)	(4,709)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	4,709	0	0	0	0
Unobligated balance lapsing	99	0	0	0	0
Budget Authority					
Transferred to /from other accounts	0	0	0	0	0
Appropriation	39,705	39,741	40,549	46,161	5,612

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Adjustment For FY 1990 Pay Increase and Related Costs	0	348
Other Cost Changes:		
Adjustment For FY 1991 Pay Increases and Related Costs	0	165
Compensable Day	0	33
Civil Service Retirement Contributions	0	(9)
Federal Employees' Retirement System	0	17
Thrift Savings Plan	0	3
Federal Insurance Contributions Act (FICA)	0	10
Health Insurance	0	113
Employees' Compensation Fund	0	11
Travel and Transportation	0	6
Rental Payments to GSA	0	63
FTS 2000	0	(69)
Printing and Reproduction	0	14
Working Capital Fund	0	89
Other Services	0	11
Supplies and Materials	0	3
Total	0	808

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Perm Pos	Amount	Perm Pos	Amount
Adjustment for 1990 pay increase and related costs:				
Total cost in FY 1990 of pay increase	0	260,500		
Less amount absorbed	0	(260,500)		
Anticipated FY 1990 pay increase supplemental	0	0		
Amount in FY 1991 to provide full year cost of pay increase	0	348,041		
Less amount absorbed	0	0		
Total, adjustment for FY 1990 pay increase			0	348

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, MBDA is absorbing the full cost of this pay increase.

Other Cost Changes:

	Perm Pos	Amount	Perm Pos	Amount
Adjustment for 1991 pay increases and related costs:				
Total cost in FY 1991 of general pay increase	0	245,021		
Less amount absorbed	0	(122,510)		
Subtotal, adjustment for 1991 general pay increase	0	122,511		
Total cost in FY 1991 of SES pay increase	0	84,760		
Less amount absorbed	0	(42,380)		
Subtotal, adjustment for 1991 SES pay increase	0	42,380		
Total, adjustment for FY 1991 pay increases			0	165

The President's Budget includes an estimated general pay raise of 3.5% efective January 1, 1991. One-half of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

One Extra Compensable Day.. 0 33

The cost of $33,258 for one extra compensable day in FY 1991 was calculated by dividing the FY 1990 estimate for personnel compensation and benefits by 260 days. ($8,647,000/260)

Civil Service Retirement (CSRS).. 0 (9)

The number of employees covered by CSRS will continue to drop as positions become vacant and are filled by employees who are covered by the Federal Employee's Retirement System. We estimate the percentage of payroll of employees who are covered by retirement systems will drop from 87.50 percent for CSRS in 1990 to 85.90 in in 1991. This will result in a decrease of 1.60 percent in the cost of CSRS contribution, for a decrease of of $8,780. ($7,839,000 x .07 x .0160)

Federal Employees Retirement System (FERS).. 0 17

The number of employees covered by FERS will continue to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of eligible employees covered by FERS will rise from 12.5 percent in 1990 to 14.1 percent in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97 percent to 13.00 percent. The calculations for increased costs for basic benefits are:

Payroll subject to retirement systems ($7,839,000)	
Basic benefit cost in 1990 ($7,839,000 x .125 x .1297)......................	$127,090
Basic benefit cost in 1991 ($7,839,000 x .141 x .1300)......................	143,689
	....
Increase in basic benefit contributions (1991 - 1990).....................	$16,599

Thrift Saving Plan.. 0 3

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The percentage of payroll employees covered by FERS will increase by 1.6 percentage points, from 12.5 percent in 1990 to 14.1 percent in 1991. We estimate the agency contribution for switchers will be 2 percent. The increased costs for contributions to the Thrift Savings Plan are:

Total Thrift Savings Plan increase ($7,839,000 x .016 x .02).....................	$2,508

Federal Insurance Contributions Act (FICA).. 0 10

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in 1991 from $50,025 in 1990, and the OASDI tax rate will increase from 6.17 percent in FY 1990 to 6.20 percent in 1991. This will result in an increase of $9,660 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 ($7,839,000 x .125 x .926).....	$907,364	
FERS OASDI tax in 1990 ($907,364 x .0617)................................		$55,984
FERS payroll subject to FICA tax in 1991 ($7,839,000 x .141 x .938).....	1,036,770	
FERS OASDI tax rate in 1991 ($1,036,770 x .0620)........................		64,280
		....
Increase (1991 - 1990)...		$8,296

Medicare:

All employees are subject to medicare contributions. The rate will remain 1.45 percent, but the percentage of payroll subject to FICA will increase from 93 percent in 1990 to 94 percent in 1991. The cost of medicare will increase as follows:

Total payroll ($7,839,000)		
Total payroll subject to FICA in 1990 ($7,839,000 x .926)................	$7,258,914	
Total payroll subject to FICA in 1991 ($7,839,000 x .938)................	7,352,982	
	....	
Increase in payroll subject to FICA (1991 - 1990)........................	$94,068	
Increase in Medicare tax ($94,068 x .01450)............................		$1,363

Health Insurance..	0	113

The Office of Personnel Management has estimated an average increase of 28.0 percent in the Government's contribution to Federal Employees' Health Insurance premium plans effective January 1989. Applied against a base of $404,000 the increase equals $113,120.

Employees' Compensation Fund..	0	11

The increase of $11 thousand is based on the difference between the FY 1990 charge of $62 thousand and the FY 1991 charge of $73 thousand.

Per Diem..	0	6

The GSA changed the maximum per diem rates for the conterminous United States effective October 9, 1988. The increase of $5,920 is based on an overall per diem increase of 4.0% applied to the per diem cost of $148,000 for FY 1990.

FTS-2000..	0	(69)

Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

Department of Commerce
Minority Business Development Agency
Minority Business Development
JUSTIFICATION OF ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	Perm Pos	Amount
Rental Payments to GSA	0	63
The increase of $63,360 is based on an average GSA Space Rental increase of 4.4% applied to the Space Rental cost of $1,440,000 for FY 1990.		
Printing and reproduction	0	14
The Government Printing Office (GPO) has estimated an increase in printing costs of 7 percent. Applied against a base of $203,000 the increase is $14,210.		
Working Capital Fund	0	89
The request of $89 thousand would fund inflationary cost increases in the Departmental Working Capital Fund to maintain the current level of operations. These include items such as within-grade increases, rent payments to GSA, printing costs, and other adjustments which are beyond the control of the Department.		
Other Services	0	11
The request of $11 thousand would fund inflationary cost increases for maintenance of equipment, and increases for maintenance of equipment, and increases for maintenance of equipment due to upgrading of ADP equipment.		
Supplies and Materials	0	3
The increase in supplies and materials is based on the 1991 GNP deflator of 4.0 percent. Applied against a base of $75,000, the increase is $3,000.		
Total FY 1991 Adjustments to Base and Built-in-Changes	0	$808

Appropriation Language and Code Citations

1. For necessary expenses of the Department of Commerce in fostering, promoting, and developing minority business enterprise,

15 U.S.C. 1512

15 U.S.C. 1512 authorizes the Secretary of Commerce to foster, promote and develop business, foreign and domestic.

2. Including expenses of grants, contracts, and other agreements with public or private organizations,

No Specific Authority

This phrase has been in the appropriation since FY 1980 and specifies that program expenses are included in the total appropriation request.

3. $46,161,000 of which $30,319,000 shall remain available until expended:

No Specific Authority

31 U.S.C. 718 provides that: "No specific or indefinite appropriation....shall be construed to be permanent or available continuously without reference to a fiscal year....unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provisions".

4. Provided, that not to exceed $15,842,000 shall be available for program management for fiscal year 1991.

This phrase has been in the appropriation since FY 1973 and limits the amount of funds for program management.

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Enterprise Development:											
Business Dev.....	Pos./BA	155	34,407	155	34,313	155	34,936	155	38,710	0	3,774
	FTE/Obl.	147	33,809	149	36,331	149	34,936	149	38,710	0	3,774
Total	Pos./BA	155	34,407	155	34,313	155	34,936	155	38,710	0	3,774
	FTE/Obl.	147	33,809	149	36,331	149	34,936	149	38,710	0	3,774

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Enterprise Development:											
Business Dev.......	Pos./BA	0	0	0	100	0	100	0	100	0	0
Total	Pos./BA	0	0	0	100	0	100	0	100	0	0

Justification of Program and Performance (by Subactivity)
(Dollar Amounts in Thousands)

Activity: Enterprise Development
Subactivity: Business Development

Goals and Objectives (for FY 1991)

Goal:

Directly assist minority entrepreneurs and businesses with their varying needs at the different stages of their development and growth.

Objective:

Provide business development services to minority clients through:

- Management and Technical Assistance (M&TA).
- Marketing and other specialized services.
- Identifying and brokering procurement opportunities.
- Identifying and brokering financing opportunities.
- Advocating minority business at national, state and local levels.

Base Program (FY 1991)

The Enterprise Development activity focuses on the development of minority business in the national economy and seeks to increase economic opportunities for MBEs. It fosters the creation, expansion and success of competitive minority businesses by providing business development services to minority firms and entrepreneurs. This activity includes MBDA's Minority Business Development Center (MBDC) program and MBDA's American Indian Program (AIP). The expansion, redirection and realignment of the Agency will result in streamlining our grants processing responsibilities, eliminating duplicative activities, providing additional personnel to implement program initiatives, assigning additional responsibilities to the regional offices, implementing a training and development program, and clustering coordinative functions.

Business Development Center Program

The program is the Agency's largest single program effort. Business development centers provide client-specific business development services through management and technical assistance (M&TA), marketing, and assistance in identifying and obtaining procurement contracts and debt and equity financing and bonding, as well as brokering, information and referral services to existing and prospective minority entrepreneurs. MBDA expects to assist over 13,000 clients with $14.5 million worth of M&TA while obtaining procurements and financing in excess of $1.24 billion combined. M&TA consists of three (3) types: (1) initial consultation, (2) general counseling assistance, and (3) specific business assistance. Initial consultations are non-billable M&TA provided to potential clients to determine whether or not an inquirer will become a client of the MBDC. General counseling assistance is non-billable M&TA provided to established clients for providing guidance, advice and information. Specific business is billable M&TA for services rendered in areas including writing business plans, putting together loan packages, accounting, personnel management, and bidding for local resources. MBDCs are encouraged to coordinate their efforts with other Federal, state and local resources.

MBDCs also play an important advocacy role in their communities, by participating in and complementing, state and local outreach activities, and in fostering business relationships between their clients and the business community.

MBDCs also play an important coordination role by acting as resource managers, identifying available public and private resources, making referrals, acting as brokers and disseminating information to local minority business enterprises. MBDCs will become partners in local business and economic development activities including those concerned with business revitalization projects in urban minority communities.

Each MBDC operates under a cooperative agreement award between MBDA and the MBDC, which can be either a for-profit or non-profit organization. Under the provisions of the cooperative agreement, MBDA and the MBDC share the cost of operating each facility (Indian BDCs are exempt from the cost-sharing requirement), with MBDA's contribution at 85% and the MBDC's portion at 15%. Cost-sharing contributions by the MBDCs amounted to $3.6 million nationally in FY 1988 for the entire MBDC network. The cost-sharing requirement may be comprised of in-kind contributions which may not exceed 50% of the cost-sharing amount. The remaining 50% may be made up in client fees and cash contributions. Client fees in FY 1988 totalled $1.7 million.

To ensure the most effective nationwide coverage, MBDA funding and goal allocation policy is driven by local market and economic conditions and data from Commerce's Census Bureau on minority populations and number of minority businesses in specific geographic sites. MBE potential market share and private and public resource presence are also taken into account.

MBDA headquarters is responsible for all elements of program design, including setting policy, goals and measurements, and the preparation of all reporting forms, handbooks and manuals.

The six regional offices are responsible for monitoring the performance of the MBDCs in their regions. This monitoring includes on-site visits, telephone checks, as well as reports received. Performance is measured both quantitatively as well as qualitatively. Quantitative measurements include the number of clients served, hours of billable M&TA provided and dollars of procurements and financings obtained. Qualitative performance is based on client satisfaction.

American Indian Program (AIP)

The American Indian Program (AIP) is currently comprised of 6 Indian Business Development Centers (IBDC)and 1 National American Indian Business Consultant. The IBDCs provide business development services to tribal and urban Indians. The American Indian Business Consultant (AIBC) organization provides specialized consultant services to native Americans nationally.

Department of Commerce
Minority Business Development Agency
Minority business development
INCREASE FOR 1991
(Dollar amounts in thousands)

	1991 Base		1991 Estimate		Increase/ (Decrease)	
	Personnel	Amount	Personnel	Amount	Personnel	Amount
Enterprise Development..............	149	34,899	150	38,747	1	3,774

Increased Financing to Reinvigorate the MBDC and AIP Programs

This request will provide funds to upgrade the services of the MBDC/AIP programs for minority business development in keeping with President Bush's statement about reinvigorating MBDA. The MBDC/AIP programs are MBDA's main programs, but these have either suffered budget reductions or, in some cases, remained at the same funding levels for several years. The funding increases will allow for higher quality levels of service and a greater number of professional personnel providing business development services to minority clients. Funding for the centers is being increased from $21,696,000 in FY 1990 to $24,570,000 in FY 1991.

The AIP is being upgraded to complement economic development of Indian reservations and to increase its national coverage. It will be funded at $2,005,000. This program has been funded at $1,495,000 for the past several years. The number of IBDCs will also increase from 6 centers to 9. The AIP goal is to assist 936 clients with 21,000 hours of M&TA and obtain $60,000,000 in combined financial and procurement assistance.

Rural Services Projects

The amount of $390,000 has been designated for Special Services Projects, which entail providing business development services in pre-designated state service areas with a large percentage of potential clients located in rural areas. The Special Services Projects will service two states in this initial experimental phase. Because of the nature of rural business development, these projects will not be a part of the standard MBDC structure, which requires a larger volume of return for the Federal Government's investment in urban areas. In addition, the scope of work will be tailored to the needs of rural business clients. It is estimated that this program will service approximately 115 clients with $170,000 in M&TA and produce a projected $1,500,000 in combined procurements and financings for rural MBEs.

	1991	1992	1993	1994	1995
Direct Obligations	38,747	38,761	38,761	38,761	38,761
Budget Authority	38,747	38,761	38,761	38,761	38,761
Outlays	35,939	37,958	38,758	38,761	38,761
FTE	150	150	150	150	150

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Enterprise Development
Subactivity: Business Development
Program Change: Improved Management and Technical Assistance

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	3,774
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	3,774

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resource development:											
Public Sector......	Pos./BA	13	1,186	13	1,215	13	1,256	15	1,453	2	197
	FTE/Obl.	12	872	12	2,059	12	1,256	13	1,453	1	197
Total	Pos./BA	13	1,186	13	1,215	13	1,256	15	1,453	2	197
	FTE/Obl.	12	872	12	2,059	12	1,256	13	1,453	1	197

Justification of Program and Performance (By Subactivity)
(Dollar Amounts in Thousands)

Activity: Resource Development
Subactivity: Public Sector

Goals and Objectives (For FY 1991)

Goal:

Reactivate and fully implement MBDA's responsibilities under Section 1 of Executive Order 12432 and Section 1 of Executive Order 11625 at the Federal, state and local levels.

Objectives:

Provide guidance in assisting Federal agencies in setting their annual minority business goals and fully monitor performance.
Reactivate MBDA's participation in the MBOC program.
Establish a new State and Local program.

Base Program (FY 1991)

The Public Sector is responsible for oversight and monitoring of all Federal agencies which have minority business procurement and financial assistance goals as directed by Section 1 of Executive Order 12432. Under Section 1 of Executive Order 11625, the Public Sector also has the responsibility for encouraging and coordinating minority businesses at the state and local levels.

In 1991, MBDA will fully implement its responsibilities under Section 1 of Executive Order 12432. MBDA receives from Federal agencies their annual Minority Business Development Program Reports, and their annual performance is compiled by the Agency to produce an annual report on Federal Agency Performance for Minority Business Development. Review, evaluation and monitoring of these plans and agencies' performances will be resumed. Activities and programs at the state and local level will be reestablished. The Public Sector division will undertake a more proactive leadership role in its relationship with other Federal agencies in securing interagency agreements and in its oversight of their minority business goals.

MBOC Program, Minority Business Opportunity Committee

MBDA will provide direction, guidance and leadership to the Federal effort to promote and support minority business development, with a special emphasis at the local level, by re-establishing its participation in the MBOC program. Cities will be selected for MBDA to carry out an MBOC demonstration project focused on such activities as recommecialization of inner cities. The project will bring together the various government agencies at the Federal, state and local levels, as well as local community organizations, to coordinate their efforts and programs to assist minority businesses. MBDA's previous participation in MBOCs was deemed to be very successful and effective, as are those MBOCs that still exist. MBDA plans to expand this program to a national program.

Department of Commerce
Minority Business Development Agency
Minority business development
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	FTE	Amount
Public Sector......................	Pos/BA	13	1,256	15	1,453	2	197
	FTE/OBL	12		13		1	

To implement the stated goal for the Public Sector, its new program initiative will be in the following areas:

State and Local (S&L) Program

We propose a plan based on a target area approach to identify cities and states that are conducting economic revitalisation programs for MBEs. Through these S&L programs, MBDA will assist MBE's gain greater participation in public sector business opportunities. MBDA will fund an organization on a national level to facilitate networking throughout specific areas of the nation, thus identifying outreach, contracting, procurement and financial assistance opportunities. There are no standard procedures for accessing these opportunities and state and local public contracting laws, rules and policies, are complex. This makes market penetration difficult for minority firms. Cities and states with programs that target the minority sector of its communities often use contract and grant awards. This process usually commences with the Mayor or Governor encouraging departmental purchasing agents to actively solicit participation of MBEs. The Public Sector will encourage and pursue this activity to enhance access to more contracts and grants for the minority business community. The S&L program will play a vital role in MBDA's efforts to bring to bear the resources of states, cities, counties and other political jurisdictions on behalf of minority business development. The total S&L procurement market vastly exceeds that of the Federal Government. One position is requested to implement the new S&L program. This position is the project manager for this new initiative and will coordinate the activities of the funded organization.

Federal-MBOC Staff Support

In order to fully implement the Agency's responsibilities under Excutive Order 12432 a position is required to assist other Federal agencies in developing their annual minority development plans; to develop interagency agreements; and to monitor performance for the accomplishment of this activity both at national and local levels. Another responsibility of this position is to coordinate the national network of MBOC's.

	1991	1992	1993	1994	1995
Direct Obligations	197	225	225	225	225
Budget Authority	197	225	225	225	225
Outlays	100	200	223	225	225
FTE	1	2	2	2	2

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Resource Development
Subactivity: Public Sector
Program Change: New Public Sector Initiatives

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	72
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	72
12.1	Civilian personnel Benefits	12
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	12
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	1
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	100
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	197

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE PERSONNEL DETAIL
(Dollar Amounts in thousands)

Activity: Resource Development
Subactivity: Public Sector
Program Change: New Public Sector Initiatives

Title:		Grade	Number	Annual Salary	Total Salaries
Business Development Specialist/Federal-MBOC		14	1	52,104	52,104
Business Development Specialist/State and Local		13	1	44,092	44,092
Total			2		96,196
Less lapse	25.00%		1		24,049
Total full-time permanent			1		72,147

Personnel Data

Full-Time Equivalent Employment:	
Full-time permanent	1
Other than full-time permanent	
Total	1
Authorized Positions:	
Full-time permanent	2
Other than full-time permanent	
Total	2

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resource Development:											
Private Sector.....	Pos./BA	14	1,766	14	1,801	14	1,850	18	2,230	4	380
	FTE/Obl.	13	2,146	13	3,426	13	1,850	16	2,230	3	380
Total	Pos./BA	14	1,766	14	1,801	14	1,850	18	2,230	4	380
	FTE/Obl.	13	2,146	13	3,426	13	1,850	16	2,230	3	380

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Resource Development:											
Private Sector.....	Pos./BA	0	259	0	500	0	500	0	500	0	0
Total	Pos./BA	0	259	0	500	0	500	0	500	0	0

Justification of Program and Performance (By Subactivity)
(Dollar Amounts in Thousands)

Activity: Resource Development
Subactivity: Private Sector

Goals and Objectives (For FY 1991)

Goal:

Establish strong public/private partnerships with the private sector to fully utilize the resources of the private sector to assist the growth and expansion of minority entrepreneurs and businesses.

Objectives:

Establish a Capital Development program to increase MBE access to both debt and equity funds.
Encourage MBE participation in international trade.
Maintain the program for Entrepreneurial Development.
Establish a Franchising and Distribution program.

Base Program (FY 1991)

The Private Sector program is responsible for the formulation of programs and activities which can be implemented on a nationwide basis by MBDA's network of MBDCs. Recently activities have been special projects. Minority entrepreneurs and businesses have been assisted, but not in a systematic way to produce a lasting impact. Activities have centered on relationships with two organizations. Major new initiatives must be undertaken to establish strong public/private partnerships with Corporate America, and other private entities, to fully utilize the resources which they can offer to assist minority businesses.

Lack of access to capital is a key deterrent and handicap to minority businesses at every stage of their formation. Thus, a major Capital Development program will be undertaken, including the identification of sources for nationwide surety bonding and expanded sources of debt and equity capital through arrangements with private financial institutions. MBDA will participate in efforts to identify and direct both equity and debt capital, from traditional as well as non-traditional sources, to MBDA's funded network. MBDA will also promote cooperation with financial institutions affected by the Community Reinvestment Act and the Bank Deregulation Act to encourage special programs for minority business investment both in urban and rural areas. The Agency will coordinate and work with such other Federal government agencies as Treasury, Agriculture, SBA and HUD to bring to bear the full resources of the public sector on the pervasive problem of minority firms' access to capital. These efforts, in conjunction with other attempts to foster receptivity among conventional debt intermediaries, will facilitate opportunities in both equity and debt funding.

Private Sector programs will serve to stimulate and promote initiatives which enhance opportunities for expansion in the number and size of minority businesses, creation of new jobs, and the preservation of existing jobs. Private Sector activity acts to increase MBE participation in the private sector business community through Private/Public Activities. These activities provide general industry information, educational training, credit information, management and technical assistance sources, and industry market opportunities to their members. Minority business and industry associations provide forums for exchange of ideas between MBEs and industry leaders, and promote minority business development in prospective industries through workshops, seminars, conventions, other meetings and newsletters. MBDA is studying methods for providing for greater private sector involvement in MBDA programs in future years. MBDA will seek to strengthen relationships with local business organizations who can play a significant role in developing minority business.

MBDA's role in assisting minority business enterprise should not be limited to Federal, state and local activities. MBDA must also engage the involvement of the psivate sector. In the past, MBDA has experienced a greater degree of private sector participation in its programs, including the involvement of major corporations throughout the U.S.

MBDA funding in 1972 led to the establishment of the National Minority Supplier Development Council (NMSDC), creating a major partnership with Corporate America. NMSDC's corporate membership is comprised of many Fortune 500 companies, representing a cross section of industries such as, automotive, telecommunication, retailing and other major industries. In addition, NMSDC has a nationwide network of 49 regional purchasing councils.

In recent years MBDA's relationship with NMSDC has drifted. MBDA now plans to re-establish this very important relationship on a phased basis. The first phase of this renewed initiative is currently underway. MBDA expects to fund regional purchasing councils in 1990.

The difference between this new initiative and previous funding is the flexibility of the relationship to meet the specific needs of the local community. The nature and scope of each relationship will be largely determined by the regional council and the BDCs involved. The stress is on meeting the needs of the local minority business community, and in forming a creative and flexible relationship. The initial phase is meant to be a true "demonstration" project, a trying out of new ideas, to see what works best.

Department of Commerce
Minority Business Development Agency
Minority business development
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	FTE	Amount
Private Sector......................	POS/BA.	14	1,850	18	2,230	4	380
	FTE/OBL.	13		16		3	

To fully reflect and implement the Redirection Plan of the Agency, Private Sector activities will focus on two major areas:

(1) Greatly expanded concentration and support of Capital Development.
(2) Enlarged program focus on current partnerships and alliances with public/private resources that go beyond procurement and seeks to tap capabilities possessed by the resources, i.e., management training, capital, marketing, etc.

Capital markets and the area of finance have become very complex and more intense over the years. Financial specializations have also become very narrow as the subject area becomes more sophisticated. Capital markets are divided into two broad categories - debt and equity. The financial instruments, behavior, conditions, and legislations governing these two areas are very distinct.

MBDA requests two (2) Capital Development Specialists - one in debt and one in equity to operate a capital development project to address capital development as a primary Agency program because of the issues of low MBE capital formation and limited capital access. To ensure proper implementation, a professional capital development specialist knowledgeable about debt and a professional capital development specialist conversant in equity are needed.

Another new area of focus of MBDA will be to promote minority business development in the franchising/distribution industries. MBDA will intiate partnerships with various organizations within these industries to increase minority ownership of franchises and distributorships. This activity can also be undertaken in cooperation with other Federal agencies' efforts at the local level to encourage the recommercialization of America's inner cities. One position is required to implement the franchising program.

International Trade Missions

Export opportunities for minorities is the primary focus of these missions; a secondary objective, education on the mechanics of exporting, will also be undertaken. Two categories of participants would benefit from this international trade activity: those minority businesses which are active exporters, but desire an "entre" to new markets and those minority businesses which are new to exporting, and consequently desire basic process and trade climate information, as well as business contacts. Both needs should be addressed. Sessions should also be structured on doing business in each country targeted, exporting, counter-trade, joint ventures, subcontracting, licensing, export investment financing, and export counseling in a specific industry/product area. MBDA expects to participate and collaborate in one to two missions directly and identify minority firms to participate more fully in matchmaker trade delegations and other missions sponsored to increase international market awareness. This activity will not only help to improve the U.S. trade position, but will also expand job opportunities and increase job creation.

MBDA will carry out its international activities with the addition of one position which will be the project manager of this program. MBDA has adopted a strategy to work closely with bureaus such as ITA, BXA, NTIS, USTTA, and EDA to ensure that Commerce programs are properly focused to support the MBDA programs. The request would support MBDA's relationship with ITA for minority entrepreneurs to take advantage of expanding markets in international trade. MBDA will also assure coordination with other agencies such as the State Department and the Agency for International Development (AID). The Agency will increase its working relationships with other Federal agencies as well as with public and private institutions, corporations and international organizations. Projects will be supported to match qualified minority businesses with specific export opportunities, especially in Latin America, Europe and the Pacific Basin countries. Increased outreach efforts will be undertaken.

MBDA will participate with minority industry and trade associations to conduct a variety of activities designed to foster and strengthen the minority entrepreneurial class. These organizations provide educational training, management and technical assistance and industry market opportunities to their members. Minority business and industry associations also act as forums for an exchange of ideas between MBEs and industry leaders. MBDA's renewed participation in this area will further encourage the development of minority entrepreneurship.

	1991	1992	1993	1994	1995
Direct Obligations	380	436	436	436	436
Budget Authority	380	436	436	436	436
Outlays	193	386	433	433	436
FTE	3	4	4	4	4

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Resource Development
Subactivity: Private Sector
Program Change: New Private Sector Initiatives

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	144
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	144
12.1	Civilian personnel Benefits	24
13	Benefits for former personnel	0
21	Travel and transportation of persons	8
22	Transportation of things	0
23.1	Rental payments to GSA	24
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	1
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	2
31	Equipment	3
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	174
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	380

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE PERSONNEL DETAIL
(Dollar Amounts in thousands)

Activity: Resource Development
Subactivity: Private Sector
Program Change: New Private Sector Initiatives

Title:		Grade	Number	Annual Salary	Total Salaries
Business Development Specialist/Equity Specialist		14	1	52,104	52,104
Business Development Specialist/Franchising Specialist		14	1	52,104	52,104
Business Development Specialist/International Special.		13	1	44,092	44,092
Business Development Specialist/Debt Specialist		13	1	44,092	44,092
Total			4		192,392
Less lapse	25.00%		1		48,098
Total full-time permanent			3		144,294

Personnel Data

	Number
Full-Time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	
Total	3
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	
Total	4

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information											
Advocacy...........	Pos./BA	7	376	7	391	7	413	7	513	0	100
	FTE/Obl.	7	375	7	391	7	413	7	513	0	100
Total	Pos./BA	7	376	7	391	7	413	7	513	0	100
	FTE/Obl.	7	375	7	391	7	413	7	513	0	100

Justification of Program and Performance (By Subactivity)
(Dollars Amounts in Thousands)

Activity: Advocacy, Research and Information
Subactivity: Advocacy

Goals and Objectives (For FY 1991)

Goals:

To improve the public perception and image of minority-owned businesses and create a more receptive and positive environment for minority-owned businesses.
To increase the visibility and the awareness of MBDA, its mission, its program and its activities in the public and private sector.

Objectives:

Provide outreach to inform minority-owned businesses about MBDA and the benefits of becoming involved in MBDA programs.
Disseminate information about minority-owned businesses to public and private officials in a timely manner.
Disseminate information to minority-owned businesses.
Develop brochures, pamphlets, displays, media public service announcements, and other information products for dissemination to the general public and other organizations that demonstrate the positive benefits available from minority-business utilization.

Base Program FY (1991)

The Advocacy program is a major information dissemination, and outreach activity of the agency. It functions to create a positive public perception and appreciation for the contributions minority entrepreneurs make to the national economy. Advocacy is further charged with creating a more receptive and positive environment for minority-owned businesses. It increases the level of awareness of minority business leaders, public and private sector policy makers and the general public to the contributions of minority business. This effort is planned and coordinated from MBDA headquarters in Washington.

The Advocacy activity advises the Agency and its funded organizations of timely significant actions of Federal and other Agencies that impact on the development and expansion of minority business. The major thrust of this program will be regulation, deregulation and legislative decisions at all levels of government which impact on minority business development in both positive and/or negative ways. Also included are other governmental or corporate advocacy activities that results in procurement opportunities and the availability of capital for minority business development. Foremost in the current advocacy program is the annual observance of Minority Business Development Week (MED Week).

One of the major activities in increasing the public awareness of the agency is the planning, developing and conducting the week long MED-Week Observance. This National event proclaimed yearly by the President during the first week in October, highlights the accomplishment of outstanding minority business owners. It also affords them an opportunity to display their products and services before potential government and private sector procurement and purchasing officials. Planning for this event requires a full year's effort by a combined body of MBDA and other government and private sector officials.

A heightened awareness of the positive contributions of minority-owned businesses will also be accomplished through a variety of methods. This methodology will include institutional representation, agency promotion, and information exchange. MBDA will provide assistance in the development and maintenance of a nationwide network for advocacy that will:

1) publicize business successes and accomplishments and identify constraints facing minority business;

2) disseminate the quarterly Advocacy Alert Bulletin, an information and advisory publication to minority-owned firms, and the national MBDA network, including the MBDCs and regional and district offices.

3) use the Agency's national network to improve the communication of ideas and strategies among minority businesses, providers of assistance to minority firms, agencies, and corporations who generate contract opportunities and financial resources for minority firms.

Department of Commerce
Minority Business Development Agency
Minority Business Development
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy......................	POS/BA	7	413	7	513	0	100
	FTE/OBL.	7		7			

Program Increase

At the increase budget level, MBDA will establish an expanded cohesive outreach campaign to:

1) increase awareness, acceptance and understanding of MBDA services;

2) increase the positive impact of the Agency's day-to day activities.

This campaign will focus on the following:

(1) updating agency publications.

(2) MBDA will convene the Advisory Council on Minority Business Enterprise as mandated by Executive Order 11625.

	1991	1992	1993	1994	1995
Direct Obligations	100	100	100	100	100
Budget Authority	100	100	100	100	100
Outlays	51	94	100	100	100
FTE	0	0	0	0	0

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Advocacy, Research & Information
Subactivity: Advocacy
Program Change: Increased Outreach

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	75
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	25
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	100

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information:											
Research...........	Pos./BA	8	1,051	8	1,070	8	1,098	8	1,613	0	515
	FTE/Obl.	8	1,129	8	1,292	8	1,098	8	1,613	0	515
Total	Pos./BA	8	1,051	8	1,070	8	1,098	8	1,613	0	515
	FTE/Obl.	8	1,129	8	1,292	8	1,098	8	1,613	0	515

Justification of Program and Performance (By Subactivity)
(Dollars Amounts in Thousands)

Activity: Advocacy, Research and Information
Subactivity: Research

Goals and Objectives (For FY 1991)

Goals:

Establish government-wide minority business policies and programs using a rational approach based on survey results and empirical data about minority-owned businesses.

Objectives:

Improve knowledge about the minority business life cycle, the underlying dynamics of change in the minority business sector, and opportunities for more productive participation by minorities as tax-paying entrepreneurs.
Provide a research base for the Agency to facilitate policy formation and also to determine what the private and public sector are doing for minority-owned businesses, what is the relative role of minority-owned business participation, and what markets are most suited for the capabilities of minority-owned firms.
Evaluate the impact of government/private programs on minority business development; and the impact of minority business on national productivity, including reduced costs for social programs.

Base Program FY (1991)

The Research program contributes substantially to Agency policy formation by establishing and maintaining information based on survey data and empirical data on which rational policy decisions can be soundly based. The areas for research activity include:

1) A need for accurately understanding what the private and public sector is doing for minority-owned business and determining the needs of minority-owned firms;

2) Information and research on the relative role of minority business participation and the Agency's need to steer minority-owned firms to markets that are more suited to their capabilities;

3) Studies to identify high-growth markets and how minority businesses can enter and survive in these markets;

4) Analysis of data from the 1990 Census, the completion of which will provide new opportunities for a comprehensive data base of research information about the status of minority business enterprises. The Research program will use Census data to support the President's Commission on Minority Business and their reports to Congress in 1990 and 1991.

The Research program develops knowledge about the relative differences in business ownership rates among racial/ethnic minority groups as compared to the national population. It analyzes the underlying causes of those differences and identifies unique barriers faced by minorities in starting and operating competitive firms. The base program will support 4-5 research studies. Specific research topics will be identified early in FY 1991 in response to findings from studies completed in FY 1989 and FY 1990. Topics will generally focus on the human, social, and financial capital constraints to minority business development and other institutional, regulatory, and discriminatory barriers to full participation by minorities as entrepreneurs in the national economy. Findings from these studies will be published and disseminated to appropriate audiences and discussed in various policy settings as the informed basis for the on-going reinvigoration of Agency policies and programs.

Department of Commerce
Minority Business Development Agency
Minority Business Development
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Research.....................	POS/BA	8	1,098	8	1,613	0	515
	FTE/OBL.	8		8		0	

Program Increase:

Policy Analysis and Formulation

There currently is no mechanism in the Executive branch to serve as the central advisor to the President on minority business issues. The increased program will enhance the research capacity to support policy analysis and formulation.

For example, a policy analysis of the Community Reinvestment Act might reveal patterns of discriminatory commercial redlining. Policy recommendations to the President for changes to this Act and/or improved enforcement mechanisms could lead to not only greater access to financial capital for minority firms but also to improvements in commercial activities in minority communities and reductions in socioeconomic ills such as drug related crime, welfare, and school dropout rates.

Research

Policy analysis must be supported by empirically-based and professionally sound research. The base level funding for research and planning/evaluation is not adequate. There are currently no program funds for planning and evaluation. And the resources available for research limit studies to basic, but necessary, topics described in the base program. The enhanced program provides resources for evaluation studies, particularly in the area of program impact evaluation. These studies will investigate not only whether programs are meeting their designed objectives; but also if they are having a positive impact on minority business development and on minority and societal socioeconomic development.

The enhanced research program will provide for market research on business development opportunities in several high-growth industries. It will provide current analysis of the many demographic changes in society and how they impact minority business development policies and strategies. It will assess the socioeconomic impact of government/private minority business programs on minority communities and society at large. The program will also provide, in cooperation with the Census Bureau more useful minority business data for policy and program officials in government and the private sector.

	1991	1992	1993	1994	1995
Direct Obligations	515	515	515	515	515
Budget Authority	515	515	515	515	515
Outlays	262	486	515	515	515
FTE	0	0	0	0	0

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Advocacy, Research & Information
Subactivity: Research
Program Change: Enhanced Research

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	5
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	20
25	Other services	480
26	Supplies and materials	0
31	Equipment	10
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	515

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Advocacy, Research & Information:											
Information Clear..	Pos./BA	19	919	19	951	19	996	21	1,642	2	646
	FTE/Obl.	18	788	18	951	18	996	20	1,642	2	646
Total	Pos./BA	19	919	19	951	19	996	21	1,642	2	646
	FTE/Obl.	18	788	18	951	18	996	20	1,642	2	646

Justification of Program and Performance (By Subactivity)
(Dollars Amounts in Thousands)

Activity: Advocacy, Research and Information
Subactivity: Information

Goals and Objectives (For FY 1991)

Goals:

Close the information gap between the information available to minority-owned firms and the information they need to fully develop and contribute to the national economy.

Objectives:

Assist minority-owned business by closing the gap between the information that is easily available to them and the information that they need to form, develop, expand, and remain in business.
Disseminate information about minority-owned businesses to public and private purchasing officials in a timely manner.
Disseminate information to minority-owned businesses.
Through information technology, improve internal management productivity, efficiency and effectiveness.

Base Program FY (1991)

The MBDA Information program serves to close the information gap that separates minority-owned business from the business information they need but can not easily obtain without assistance from MBDA. This includes data and information needed for business transactions, marketing development, business development, and business decision-making. By using modern technology and telecommunications capability, MBDA can enable minority-owned businesses to tap into relevant business information and have it available on-line for the purpose of decision-making. This includes providing to potential minority entrepreneurs, and established minority-owned businesses, information they need for establishing, developing, and expanding a business. For this purpose the Agency identifies and obtains or develops information systems which can substantially enhance minority businesses. The information management program provides minority business clients with on-line access to timely business information in computer data bases.

One objective of this program is to "close this information gap" -- which separates potential entrepreneurs and minority businesses from essential information -- by providing the business information they need for establishing, developing, and expanding a business. To help meet this objective, the agency establishes and maintains contracts with commercial Business Information Systems (BIS) vendor(s) to provide minority-owned businesses with nationwide remote on-line interactive access -- from 100 MBDCs throughout the nation -- to computer data bases of economic and marketing data, construction opportunities, and marketing opportunities. At each of these centers, business development specialists are available to work with the MBDA clients in defining their needs and to utilize the micro computers and information for business decisions, loan packaging, and locating contracting opportunities in the private and public sector.

MBDA also assists purchasing officials -- in the private sector, Federal agencies, State governments, and local governments -- to locate minority-owned firms to be considered as potential suppliers of goods and/or services.

Department of Commerce
Minority Business Development Agency
Minority Business Development
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Information................	POS/BA	19	996	21	1,642	2	646
	FTE/OBL	18		20		2	

Program Increase:

This increase proposes to reinvigorate the MBDA Information Program by enhancing the use of the BIS, and establishing a Minority Business Enterprise Information Center (MBEIC). The MBEIC will become an enhanced version of and replacement for the MBDA Information Clearinghouse. The MBEIC will be responsible for disseminating business information to minority-owned business and the MBDC network.

The MBEIC will interact with purchasing officials to locate minority-owned firms vendors. In FY 1991, because of the increased level of MBDA activity, ths MBEIC will respond to an increased number of these requests. The MBEIC will be equipped with a variety of equipment for rapid dissemination of information, including electronic mail, so that most firms will be able to obtain information immediately. For purchasing officials, this timeliness can make the difference between using or not using information about potential minority-owned vendors.

	1991	1992	1993	1994	1995
Direct Obligations	646	672	672	672	672
Budget Authority	646	672	672	672	672
Outlays	328	622	670	672	672
FTE	2	2	2	2	2

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Advocacy, Research & Information
Subactivity: Information
Program Change: Business Information Systems

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel Benefits	0
13	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	500
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	500

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar Amounts in thousands)

Activity: Advocacy, Research & Information
Subactivity: Information
Program Change: Minority Business Enterprise Information Center

Object Class		1991 Increase/ (Decrease) BA/Obl.
11	Personnel compensation	
11.1	Full-time permanent	66
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	11
11.8	Special personnel services payments	0
11.9	Total personnel compensation	77
12.1	Civilian personnel Benefits	11
13	Benefits for former personnel	0
21	Travel and transportation of persons	36
22	Transportation of things	0
23.1	Rental payments to GSA	12
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	2
24	Printing and reproduction	8
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	Total	146

Department of Commerce
Minority Business Development Agency
Minority Business Development
PROGRAM CHANGE PERSONNEL DETAIL
(Dollar Amounts in thousands)

Activity: Advocacy, Research & Information
Subactivity: Information
Program Change: Minority Business Enterprise Information Center

Title:		Grade	Number	Annual Salary	Total Salaries
Computer Specialist		13	2	44,092	88,184
Total			2		88,184
Less lapse	25.00%		0		22,046
Total full-time permanent			2		66,138

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	2
Other than full-time permanent	
Total	2
Authorized Positions:	
Full-time permanent	2
Other than full-time permanent	
Total	2

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	$7,998	$8,280	$282
11.3	Other than full-time permanent	292	292	0
11.5	Other personnel compensation	120	131	11
11.8	Special personnel services payments	0	0	0
11.9	Total personnel compensation	8,410	8,703	293
12.1	Civilian personnel Benefits	1,467	1,514	47
13	Benefits for former personnel	0	0	0
21	Travel and transportation of persons	376	500	124
22	Transportation of things	40	40	0
23.1	Rental payments to GSA	1,503	1,551	48
23.2	Rental payments to others	0	0	0
23.3	Commun., util., misc. charges	360	364	4
24	Printing and reproduction	217	245	28
25	Other services	4,560	5,565	1,005
26	Supplies and materials	78	80	2
31	Equipment	75	88	13
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	23,463	27,511	4,048
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total, Direct Obligations	40,549	46,161	5,612
	Reimbursable Obligations	600	600	0
	TOTAL OBLIGATIONS	41,149	46,761	5,612

Department of Commerce
Minority Business Development Agency
Minority Business Development
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Personnel Data	1991 Base	1991 Estimate	Increase/ (Decrease)
Full-Time Equivalent Employment:			
Full-time permanent	197	203	6
Other than full-time permanent	10	10	0
Total	207	213	6
Authorized Positions:			
Full-time permanent	216	224	8
Other than full-time permanent	26	26	0
Total	242	250	8

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent			
Executive level	$0	$0	$0
Senior executive service	505	505	0
General schedule	7,493	7,775	282
Commissioned officers	0	0	0
Wage board/wage marine	0	0	0
Scientific & professional (P.L. 80-313)	0	0	0
Examiners of patent appeals (P.L. 82-593, 98-622)	0	0	0
Examiners of trademark appeals (P.L. 98-622)	0	0	0
Senior foreign service	0	0	0
Foreign service staff	0	0	0
Foreign service nationals	0	0	0
Consultants & experts	0	0	0
Students	0	0	0
Subtotal	7,998	8,280	282
11.3 Other than full-time permanent			
General schedule	292	292	0
Wage board	0	0	0
Experts & consultants	0	0	0
Hourly	0	0	0
Subtotal	292	292	0
11.5 Other personnel compensation			
Overtime	15	26	11
SES performance awards	30	30	0
Cash awards	30	30	0
Merit pay awards	45	45	0
Other	0	0	0
Subtotal	120	131	11

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11.8 Special personnel services payments			
Foreign service officers (State)	0	0	0
Other	0	0	0
Subtotal	0	0	0
11.9 Total personnel compensation	8,410	8,703	293
12.1 Civilian personnel benefits			
Civil service retirement	498	515	17
Federal employees' retirement	152	157	5
Thrift savings plan	24	25	1
Federal insurance contribution act	182	188	6
Health insurance	517	534	17
Life insurance	21	22	1
Employees' compensation fund	73	73	0
Other	0	0	0
Subtotal	1,467	1,514	47
13 Benefits for former personnel			
Severance pay	0	0	0
Unemployment compensation	0	0	0
Other	0	0	0
Subtotal	0	0	0
21 Travel and transportation of persons			
Common carrier	190	252	62
Mileage	16	22	6
Per diem/actual	154	204	50
Vehicular	16	22	6
Other	0	0	0
[Overseas estimates]	0	0	0
Subtotal	376	500	124

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
22	Transportation of things	60	60	0
	[Overseas estimates]	0	0	0
23.1	Rental payments to GSA	1,503	1,551	48
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	0	0	0
	Rental of office copying equipment	0	0	0
	Other equipment rental	0	0	0
	Federal telecommunications system	143	143	0
	Other telecommunications services	130	134	4
	Postal Service by USPS	87	87	0
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	360	364	4
24	Printing and reproduction			
	Publications	164	192	28
	Public use forms	0	0	0
	Envelopes	0	0	0
	Other	53	53	0
	[Payments to GA, WCF]	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	217	245	28

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
25	Other services			
	Training:			
	University	31	31	0
	Office of personnel management	34	34	0
	Other	3	3	0
	Maintenance of equipment	136	136	0
	GSA reimbursable services	10	10	0
	ADP services	104	104	0
	Telecommunications services	20	20	0
	Payments to GA, WCF	2,281	2,281	0
	Other non-government contracts	83	138	55
	Other	1,858	2,808	950
	[Overseas estimates]	0	0	0
	Subtotal	4,560	5,565	1,005
26	Supplies and materials			
	Office supplies	62	64	2
	ADP supplies	16	16	0
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	78	80	2
31	Equipment			
	Office machines and equipment	36	39	3
	ADP hardware	36	45	9
	ADP software	3	4	1
	Other	0	0	0
	[Overseas estimates]	0	0	0
	Subtotal	75	88	13

Department of Commerce
Minority Business Development Agency
Minority Business Development
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar Amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contr.butions	23,463	27,511	4,048
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	Total, Direct Obligations	40,549	46,161	5,612
	Reimbursable Obligations	600	600	0
	TOTAL OBLIGATIONS	41,149	46,761	5,612

Department of Commerce
Minority Business Development Agency
Minority Business Development

Average Grade and Salaries

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Average ES salary	$74,190	$74,931	$91,723
Average GS grade	9.86	9.86	9.99
Average GS salary	$37,481	$38,037	$40,182

Department of Commerce
Minority Business Development Agency
Minority Business Development

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Consulting Services	$27	$82	$0
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total	27	82	0

MBDA has a need for a consultant that possesses both theoretical and practical knowledge in the areas of management planning, entrepreneurship, international strategic alliances, financing, and venture capital. MBDA needs this expertise in its reinvigoration efforts, especially in designing and planning new programs.

Department of Commerce
Minority Business Development Agency
Minority Business Development

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	FY 1988 Actual	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Periodicals	35	40	43	60
Pamphlets	28	52	55	77
Audiovisuals	0	0	0	0
Total	63	92	98	137

Executive Order 11625 authorizes the Minority Business Development Agency (MBDA) to provide "for the development, collection, summarization, and dissemination of information that will be helpful to persons and organizations throughout the nation in undertaking or promoting the establishment and successful operation of minority business enterprise." MBDA's Office of External Affairs is responsible for the creation of periodicals, publications, and audiovisuals to carry out the mandate set forth in Executive Order 11625.

Mr. **Dwyer**. Here to testify is Kenneth Bolton, Director of the Minority Business Development Agency.

Mr. Bolton, since this is your first appearance before this committee, we shall insert your biographical sketch into the record at this point, and then you may proceed with your statement.

[The biography of Kenneth E. Bolton follows:]

BIOGRAPHY OF KENNETH E. BOLTON, DIRECTOR, MINORITY BUSINESS DEVELOPMENT AGENCY, U.S. DEPARTMENT OF COMMERCE

Kenneth E. Bolton was appointed as Director of the Commerce Department's Minority Business Development Agency on April 3, 1989.

Mr. Bolton is the ninth Director to head the agency since its inception in 1969. Before joining the Commerce Department, Mr. Bolton was Director of the Office of Policy in the U.S. Department of Transportation's (DOT) Urban Mass Transportation Administration (UMTA). He served previously as policy advisor on joint development and downtown revitalization for the District of Columbia. From 1976 to 1980, he was Executive Director of DOT's Minority Business Resource Center. He was a senior project manager for the U.S. Department of Housing and Urban Development's (HUD) New Communities Development Corporation from 1971 to 1976. Before entering the Federal Government in 1971, he was Executive Director for the Model Cities Redevelopment Agency in Tulsa, Oklahoma. Prior to his military service in the U.S. Army as an artillery officer from 1963 to 1965, he was a management systems analyst at Rockwell International Aerospace Systems Group.

His professional affiliations include: the Association of MBA Executives, the America Society for Public Administration, the National Academy of Sciences' Transportation Research Board, the Government Finance Officers Association, the Society for Information Management and the Conference of Minority Transit Officials.

Mr. Bolton, his wife Beryl A., and their two children Kenneth Jr., and Stephanie Lynn, reside in Reston, Virginia.

A native of Houston, Texas, Mr. Bolton received a Bachelor of Science degree in Mathematics and Statistics from Howard University and a Master of Business Administration degree in Finance and Investments from George Washington University.

Mr. **Bolton**. Thank you, Mr. Chairman, and good morning to you and other members of the Committee. As the ninth director of the Minority Business Development Agency, it is my privilege to serve President Bush and Secretary Mosbacher and to have the opportunity to address this subcommittee at a critical time for this Nation's economic security, and at a time when we are aggressively seeking ways to improve minority business entrepreneurship in this country.

I have with me this morning, Mr. Chairman, members of my staff: Deputy Raphael Franchi; Mr. Bill Ogden, our chief counsel; Mr. George Parish, my administrative officer; and here at my left Ms. Harolyn Boulware, who is our budget officer. Other members of the staff are here to answer questions if need be.

I also, Mr. Chairman, have a full statement that I would like to submit for the record, and I will read a short statement here.

Mr. **Dwyer**. Please proceed.

Mr. **Bolton**. President Bush has made minority business development a priority on the national policy agenda. The President has said, "America will have to field a full team if we are going to be competitive . . . it's in the interests of America to economically empower all."

The President and the Secretary believe, as I do, that a healthy minority business enterprise sector can contribute greatly to the continued growth of the U.S. economy. Minorities comprise a relatively large share of the Nation's population growth, and are becoming increasingly important as a source of labor and entrepreneurship.

In May 1989, as our first step toward reinvigorating the MBDA—reinvigoration is the charge that we have gotten from the President—and increasing the effectiveness of MBDA's program, we sought the advice of experts in the corporate world and the public sector, operators of minority business programs throughout the United States, members of trade associations and interest groups, minority business owners, and others who know the issues best and have a better idea of how we can go about expanding minority business enterprise participation programs and having those programs work more effectively. Many of the steps that we have taken to redirect the program are therefore based upon our discussions with these many groups.

I want to talk about two kinds of actions that we have taken already, just in the 10 months that I have been on board. They break out into two categories: Management activities to improve the management of the MBDA—there have been problems there—and to improve the overall programs and program delivery services to the minority firms.

MANAGEMENT IMPROVEMENTS

One of the first things that I did, sir, was to hire a new and competent staff to enforce and implement the provisions of the Financial Managers' Fiscal Integrity Act, to prevent fraud, waste, and abuse in the program. We issued internal controls to more effectively manage special demonstration projects. These projects are often awarded at the discretion of the director, and have been criticized in audits by the Office of Inspector General in the past, so we have issued new instructions and guidelines on how to handle those types of projects.

We transferred an experienced regional director to the headquarters to reduce our grants backlog and improve the management process for issuing grants. At the time of my arrival, there were quite a few grants that were being delayed. Centers had to be shut down. I think we have that fully under control at this time.

We also conducted training conferences in all six regions attended by the regional staffs and project directors of all of our 103 Business Development Centers throughout the United States. The purpose of those conferences was to get the new message out that any mismanagement practices of the past would not be tolerated in the future. We talked about penalties and we talked about how we would terminate contracts if we continued to observe those types of abuses.

We hired an experienced business consultant, a professor at a local university, to help us evaluate critical program deficiencies and coordinate the preparation of what has come to be known as a redirection plan for the Minority Business Program. We retained the services of a consortium of highly regarded investment capital specialists to advise the MBDA and its clients on resources available and the need for investment capital to assist growth and expansion of minority firms.

These are just a few of the management steps that were taken, and in a similar fashion we have taken steps to strengthen the overall program and program direction for the minority business activities.

PROGRAM IMPROVEMENTS

Secretary Mosbacher has established a Minority Enterprise Development Advisory Council. This advisory council draws upon 25 outstanding business leaders. It is chaired by former Secretary of Commerce Maurice Stans. Members include noted individuals, such as the Chairman of Amoco and the Chief Counsel for Chrysler. We brought in the major corporate groups as part of the advisory council.

One of the reasons to establish this council is that we believe that in order to really assist minority firms in mainstreaming or coming into the mainstream, it is going to require more than just a Federal program or a set of Federal programs. We are going to have to get the corporate sector really involved and supportive of our efforts. We look to the advisory council to assist MBDA in involving the corporate sector in our efforts.

One other thing we have done is to fulfill the commitment that Secretary Mosbacher made when he appeared before this Committee last year. His concept is to utilize the full resources of the Department of Commerce in order to assist the minority businesses of this country.

JOINT COMMERCE INITIATIVES

Therefore, we have entered into a number of joint agreements with other parts of the Department of Commerce, for example, the U.S. Travel and Tourism Administration which represents the interests of a $300 billion industry. We want to aid minority firms in getting involved in the travel and tourism industry, and here in the Department of Commerce we have resources to make that happen. The same thing goes for telecommunications, a growing industry, and here in Commerce we have the National Telecommunications and Information Administration which can make things happen in terms of getting information and resources into the hands of those who can take advantage of opportunities in the telecommunications field.

1991 BUDGET REQUEST

To go then, sir, from the program improvements to the 1991 budget request, our request for a 15 percent budget increase will permit us to improve the quality of our service delivery system as well as to expand the national programs, giving new direction to the program from Washington.

Presently we have 100 or so Business Development Centers scattered throughout the United States, and I must say that our own evaluation as well as that of the GAO and the Office of Inspector General has made clear that we have put those organizations out there without much networking support. This is one of the reasons we are developing a strong set of national programs, so that, through the network, we can feed the appropriate marketing and other information to the Business Development Centers and really be pro-active about this program, as opposed to just relying upon walk-in traffic.

We are asking for an increase of about $2.9 million, so that we can upgrade the personnel and the quality of service in those 103 Business Development Centers. At the same time, we want to increase the number of American Indian Business Development Centers, often located on reservations, from six to nine.

We would also like to institute a rural services program. Many minority firms exist in rural areas throughout the southeastern part of the United States, parts of California, Texas, and other States. They are not all concentrated in the urban centers. We have two demonstration programs that we want to initiate this year to provide more technical assistance to rural communities.

At the same time, we want to reestablish a very critical relationship that has been severed, and that is our relationship with State and local governments. State and local governments play an active part in minority business procurement activities and technical assistance programs. The Federal effort clearly should be linked to the efforts of the State and local governments, so that we are not competing and duplicating the efforts of one another.

We are requesting an increase of funding of $300,000 and four additional positions, to staff some very critically needed areas such as debt and equity capital, international trade, and franchising. Franchising has been identified as a target area for program expansion. In fact, we expect to double the number of franchise operations in the next 2 to 3 years.

Mr. Chairman, this concludes a summary of my statement. I would be pleased to answer any questions that you or members of the committee might have.

[The statement of Mr. Bolton follows:]

DEPARTMENT OF COMMERCE
STATEMENT OF THE DIRECTOR
KENNETH E. BOLTON
OF THE
MINORITY BUSINESS DEVELOPMENT AGENCY
BEFORE THE HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES
MARCH 6, 1990

Mr. Chairman and Members of the Committee:

As the ninth Director of the Minority Business Development Agency (MBDA), it is my privilege to serve President George Bush and Secretary of Commerce Robert Mosbacher, and address this Subcommittee at a critical time for this Nation's economic security and advancement of minority entrepreneurship. I was sworn in on April 3, 1989, and would like to spend the time allotted for my opening statement to apprise the members of this Subcommittee of what we have done since that day to carry out President Bush's charge to reinvigorate minority business development programs in the Commerce Department. I will discuss some of the problems I found when I took over at MBDA; some of the steps already taken to correct those problems; and further, how our Fiscal Year 1991 budget request will continue to improve the operations of MBDA. Accompanying me today are Rafael Franchi, Deputy Director; William Ogden, Chief Counsel; George Parish, Administrative Officer; and our Budget Officer, Harolyn Boulware.

National Policy Priority

President Bush has made minority business development a priority on the Nation's policy agenda. The President has said, "...America will have to field a full team if we are going to be competitive...it's in the interest of America to economically empower all" and further, "...that's why I aim to restore and reinvigorate the vision behind the Office of Minority Business Enterprise."

Status and Condition of Minority Business

While the efforts of the Executive Branch and the Congress have helped to mitigate the effects of the historic exclusion of minority businesses from the competitive marketplace, a broad spectrum of minority businesses have benefitted from the programs available. Minority business enterprises continue to experience obstacles in entering and thriving in the free enterprise system.

The most recent statistics indicate that while minorities comprise 21 percent of the American population, they own 5.8 percent of America's businesses. These businesses account for only 0.6 percent of gross business receipts and generate less than one percent of the employment produced in this country annually -- figures that have not changed significantly in 20 years.

Despite the actions taken to date, it is clear that much remains to be done to bring the Nation closer to the goal of ensuring equal opportunity for all Americans to participate in our free enterprise system.

National Competitiveness Advanced

A healthy minority business enterprise sector can contribute to the continued growth of the U.S. economy. Minorities comprise a relatively large share of the population growth of the Nation and are becoming increasingly important as a source for labor and entrepreneurship.

To the extent that Federal programs can lead in alleviating the unique difficulties confronting minority business enterprises and foster a healthy minority commercial sector, these businesses can, in turn, provide a source of employment to many residents of distressed rural and urban areas, thereby reducing unemployment and decreasing the need for transfer payments and other Federal funds. The minority business development program is a program to enhance the Nation's competitiveness and economic security.

Reason for Optimism

There are exemplary cases of successful minority entrepreneurs who are beginning to make a substantial contribution to the Nation's economy. There are many aspiring minorities who developed business experience and managerial skills in major corporations and are ready to leave those corporations for the challenges of business ownership. There is good reason for optimism for the future of minority entrepreneurship -- the global marketplace is ready for it and President Bush and his Administration support it.

Agency Reinvigoration

In May 1989, as our first step toward reinvigorating MBDA and increasing the effectiveness of its programs, we sought the assistance and advice of experts in the corporate world and the public sector, operators of minority business programs, members of trade associations, minority business owners, academicians and others on how best to reinvigorate MBDA.

We even invited those who are critical of our programs. The steps we have taken since then are responsive to the suggestions by these experts as well as staff recommendations.

Problems and Solutions

The MBDA has problems that reduce its effectiveness. Some of these have been brought to our attention by General Accounting Office and Department of Commerce Office of Inspector General reports. The problems documented in these reports are managerial and program related, and we have taken steps to eliminate them in both areas.

Management Problems

I have taken steps to improve the management of MBDA. Some of these taken within the first six months included:

- Hiring of a new and competent staff to enforce and implement the provisions of the Financial Integrity Act;
- Inspecting the capabilities of the regional offices to ensure effective compliance with internal controls to guard against waste, fraud and abuse;
- Issuing internal instructions that govern the management of MBDA's special demonstration projects;
- Conducting six conferences attended by regional staff and MBDCs that stressed concerns regarding past mismanagement practices and penalties for further abuse;
- Transferring an experienced Regional Director to Headquarters to clean up grants backlog and management process;
- Hiring an experienced business consultant to evaluate critical program deficiencies and to coordinate preparation of the Redirection Plan.

Program Problems

MBDA has been operating for almost twenty years under Executive Order (11625, issued 1971, and 12432, issued 1983). The level of emphasis and policy direction has varied much more than would be expected under a legislative mandate. For example, the original concept for MBDA twenty years ago envisioned a set of national resource development programs along with a network of local service delivery organizations. Approximately ten years ago that set of national resource programs began to diminish.

I am referring to programs such as the:

- National Minority Supplier Development Council;
- The Interagency Council on Minority Business Enterprise;
- Capital Development;
- Technology Commercialization;
- International Trade; and
- State and Local Government

Our program has suffered due to lack of national policy and program definition. We have 103 MBDCs which serve as a skeleton for a national service delivery network. MBDCs have been forced to rely heavily on walk-in clients. They have not been supported by proactive nationally driven programs that address the critical problems of lack of access to capital, market opportunities and business information.

New Program Initiatives

We began in 1989 and are continuing in 1990 to correct these deficiencies by developing new national policy initiatives that link Federal efforts with those of the private sector and state and local governments.

- Secretary Mosbacher established the first meeting of the Minority Enterprise Development Advisory Council (MEDAC), a twenty-five member Council committed to the furtherance of minority business opportunity. The Council is chaired by former Secretary of Commerce Maurice Stans and includes representatives from various industries, including franchising, oil, banking, and telecommunications. The Council will advise the Secretary of Commerce and MBDA on creative ways to expand minority enterprise development;

- We have established major cooperative programs with the United States Travel and Tourism Administration (USTTA) to expand participation by minority entrepreneurs in the $300 billion travel and tourism industry;

- We have established a cooperative program with the National Telecommunications and Information Administration to identify strategies for increasing minority penetration into the fast growing telecommunications industry;

- We have established a fellowship program for increasing the competitiveness of minority firms in manufacturing by setting up an advance research and training program for minority engineers with the Technology Administration's, National Institute of Technology;

- We have retained the services of a national consortium of highly regarded investment capital experts to advise MBDA and its clients on resources available and the level of need for investment capital critical to the growth and expansion of minority firms;

- We have organized a staff task force and will soon have an experienced management consulting contractor review our entire service delivery system.

Other Accomplishments

We have entered into an agreement with the Department of Transportation (DOT) to develop a program to assist in achieving their ten percent procurement goal. Our MBDCs will provide management and technical assistance to minority firms to tap this lucrative market.

We are finalizing an agreement with the International Franchise

Association. We have identified franchising as a growth industry and established a target to double the number of minority franchises.

In October 1989, MBDA held its annual Minority Enterprise Development (MED) Week. It was one of the most outstanding and successful MED Weeks in the seven-year history of this annual National observance.

This is only a partial list of the types of program initiatives already under way to bring the agency up to speed for full implementation of our proposed 1991 budget.

Our request for a fifteen percent budget increase will permit us to improve quality by expanding our two-part emphasis of upgrading the quality of our service delivery network and increasing our national program resources. We support Secretary Mosbacher's Total Quality Management (TQM) concept and will implement it throughout MBDA's programs to improve the efficient use of our resources.

Let me now turn to our proposals for Fiscal Year 1991.

Enterprise Development

In FY 1989, our agency's Minority and Indian Business Development Center Program assisted over 15,000 clients nationwide. The MBDCs exceeded our national goals by generating more than $912 million in contracts and $451 million in financial packages for their clients.

Not only do the MBDCs help minority entrepreneurs to package loans, prepare business plans, and procure contracts; they serve as advocates for minority businesses in their local communities and actively leverage marketing opportunities.

We plan to increase funding for the centers from $21.7 million in FY 1990 to $24.6 million in FY 1991. This increase will allow for a higher quality of service and a moderate increase in professional staff years. In addition, we are increasing the number of Indian Business Development Centers (IBDCs) from six (6) to nine (9) in order to complement economic development on Indian reservations and to increase the national coverage of American Indian business needs.

Rural Services

Our MBDCs service the minority population in metropolitan areas, but there are a substantial number of minority firms in rural regions of the country. There are also good opportunities for growth in the travel and tourism industry. We will target these as part of the agreement with the USTTA which I mentioned earlier.

In FY 1991, MBDA will undertake a new rural business development initiative, for which we are requesting $390 thousand. This program will provide business development service in pre-designated states with large percentages of potential clients in rural communities. We expect to serve clients in rural communities with management and technical assistance.

Resource Development

I have already indicated earlier several national programs directing the full resources of the Commerce Department to minority business development (e.g., Travel and Tourism, Telecommunication, Advanced Manufacturing Technology). These national resource development programs are essential for the MBDCs to properly serve their clients.

Public Sector

MBDA has ongoing public sector programs that operate to develop and promote business opportunities. At the Federal level, MBDA plays a key role in reviewing, evaluating and monitoring Federal agencies' annual procurement and financial assistance goals, as established by Executive Orders 11625 and 12432.

In FY 1991, we are requesting an increase of $139 thousand and one (1) position for the public sector activity for a new state and local program to encourage minority businesses to participate more fully in existing public sector business opportunities. MBDA's program will be targeted to cities and states that are conducting economic revitalization programs that minority businesses can access.

We are also requesting one additional position and $52 thousand to increase our assistance to Federal agencies in developing their annual procurement and financing plans, and to monitor performance at both national and local levels.

Private Sector

No amount of Federal effort alone would achieve our goals of having minority business move into the mainstream of the free enterprise system without substantial new participation by the private sector. Secretary Mosbacher and Mr. Stans are committed to this objective and, Mr. Chairman, we are moving forward with it. We are seeking new relationships with the private sector through:

- The Minority Enterprise Development Advisory Council which includes top corporate officials;
- A new working relationship with the National Minority Supplier Development Council;
- Fostering relationships between financial institutions and the MBDCs to implement commercial lending provisions of the

Community Reinvestment Act; and

- Encouraging corporate mentorship programs.

The main thrust of the private sector program is to stimulate and promote initiatives which enhance opportunities in private sector markets, and address the need for capital development.

A capital development program will be designed to assist minority businesses with their greatest problem--lack of access to both debt and equity capital. The capital development program will be designed to increase the flow of both debt and equity funds into viable minority businesses.

In addition, MBDA will initiate a project to help minority businesses participate in international trade, franchising opportunities, and entrepreneurial development. MBDA is requesting an increase of $380 thousand to carry out these programs, and four positions: one debt, and one equity capital specialist, an international trade specialist and a franchising specialist.

Advocacy, Research and Information

Advocacy

MBDA serves as the primary advocate within the Federal Government for minority businesses. This includes promoting minority businesses throughout the public and private sectors and ensuring that minority businesses are aware of market opportunities. Our week-long observance of

MED Week is one of the most visible aspects of this program. MBDA is requesting an increase of $100 thousand to expand MBDA outreach activities and convene bimonthly meetings of the Minority Enterprise Development Advisory Council.

Research

Our Research program helps us to develop the information needed for project development based on objective data and analysis of the status, conditions and constraints on the growth of minority entrepreneurship. This research helps us to determine what the public and private sectors are doing for minority business, what markets are best suited for the capabilities of minority firms, and the impact that minority programs have on economic programs and productivity. We are requesting an increase of $515 thousand to enhance the Research program by conducting policy analysis and formulation activities and program impact evaluation studies. This request will also allow MBDA to expand its market research on business development opportunities and conduct analyses of demographic changes and their impact on minority business.

Information

Minority businesses need access to capital and markets, but they also need access to information. In today's information age, to remain competitive, it is vital for minority businesses to have the most current data necessary for marketing and business development. MBDA established the Business Information Systems (BIS) through contracts with private vendors, to provide remote on-line interactive access among MBDCs, located throughout the Nation, to those BIS computer data bases of economic and marketing data, and information about construction and marketing opportunities.

Our budget request includes an increase of two (2) positions and $654 thousand to fund the BIS and establish and staff the Minority Business Enterprise Information Center (MBEIC), which will disseminate information to minority-owned enterprises regarding opportunities in the marketplace. MBEIC will help purchasing officials and others locate minority vendors and will provide a vital service to minority firms in attaining competitiveness in the market.

Mr. Chairman, this concludes my statement, I will be pleased to answer any questions which you or Members of the Committee wish to raise at this time.

Mr. DWYER. Thank you, Mr. Bolton.

You talked about your increase. Is that the amount you requested from OMB, or was it a larger amount and they cut you back to this level?

Mr. BOLTON. We did request a larger amount from OMB, and we reconciled our request to this level.

Mr. DWYER. I see. That's kind of an age-old way of doing business, ask for a lot and retreat to a more logical amount.

Mr. BOLTON. We are very aggressive about this program, and perhaps——

Mr. DWYER. You are one of the few people to have come before us with an increase from OMB. [Laughter.]

LEGISLATION

Mr. DWYER. What is the status of your authorizing legislation for 1991?

Mr. BOLTON. We have developed a draft bill within the Department. We expect to have something that we can present to and discuss with OMB within the next few weeks. We have looked at many of the problems that have plagued the program in the past and formulated new approaches within the draft legislation.

Mr. DWYER. What kind of a legislative timetable do you have? Do you think you will have an authorization passed by the time we go to markup on our bill?

Mr. BOLTON. I don't know how fast it will be able to move through the authorization process. It is the highest priority for me in the agency at this point.

Mr. DWYER. Okay, thank you. I am going to defer to Mr. Kolbe. He has a question, I am sure.

Mr. KOLBE. I was going to ask if you would just yield on that point, Mr. Chairman.

Mr. DWYER. Yes.

Mr. KOLBE. On the Chairman's question about your authorizing legislation, would this be the first time you have had authorizing legislation? Has there never been authorizing legislation for this program?

Mr. BOLTON. This program has operated for more than 20 years——

Mr. KOLBE. Under Executive Order?

Mr. BOLTON [continuing]. Under Executive Order.

Mr. KOLBE. So when the Chairman asked about your authorizing legislation, we were really asking about your maiden voyage into this field?

Mr. BOLTON. Yes, sir, but one we are quite willing to take.

Mr. KOLBE. Have there been previous attempts to get authorizing legislation? I assume there have been.

Mr. BOLTON. A bill was introduced in the Congress the last session, I believe, and maybe passed by a voice vote in the House, but there has not been one out of committee on the Senate side. I understand the bill has been reintroduced in March of 1989 for consideration in this session.

Mr. KOLBE. In March of 1989, is that your bill?

Mr. BOLTON. No, sir.

Mr. KOLBE. That is not your bill?

Mr. BOLTON. That is not.

Mr. KOLBE. Are you working with that committee, or are you working to develop your own piece of authorizing legislation?

Mr. BOLTON. We are in touch with that committee on some of the precepts, as well as with Members of the Senate.

Mr. KOLBE. Let me tell you first of all, Mr. Bolton, that I appreciate your being here and welcome you to the Committee, along with my colleagues, and wish you the best.

Mr. BOLTON. Thank you.

Mr. KOLBE. I share a commitment with you and with this President to minority business. We have a Minority Business Center in my community that I think functions very well, and I am very, very pleased to have been associated with the work of that group, and I am very proud of the work that is being done.

But I was interested in your statement that while minorities comprise 21 percent of our population, they own only 5.8 percent of the businesses, and that constitutes only six-tenths of a percent of the gross business receipts and less than 1 percent of the employment. You note that those figures have not changed significantly in 20 years, and yet on the next page you say there are reasons for optimism.

Considering that the programs that we have been doing have not done anything to change that significantly in 20 years, unless we are embarking upon something that is massively different, why do you have reason for optimism?

MINORITY BUSINESS OWNERSHIP

Mr. BOLTON. We would like to think that we will embark upon something that is massively different, in the first instance, but I would like to explain those numbers just a bit. While the share of gross revenues has not increased by any appreciable amount, the number of minority businesses, actual firms, have more than doubled in this period of time.

Mr. KOLBE. That 5.8 percent figure is doubled?

Mr. BOLTON. It has doubled from 2.9, so we do see a lot of movement structurally among the firms. There are quite a number of impressive high-tech firms. I think part of the smallness of the revenue size, the share of the revenues, is due to the fact that the economy generally and other businesses have moved so rapidly, at a much more rapid pace of expansion, and minority firms are still small in size and in the volume of business that they actually do.

Mr. KOLBE. Well, I certainly hope what we are talking about works. If you were to summarize in a word, what do you think is the key to making minority business efforts work, to increase this percentage and increase the participation by minorities in the American economic dream as it relates to business? What is the key to success there?

Mr. BOLTON. I think the key is leadership and a policy position by the Nation, the kind of position that the President has taken. He does not equivocate on where he stands on the issue, and just as we now have that strong policy position, then we will have all the other resources, both in the public sector and in the private sector, I believe, through goodwill and interest.

A lot of people are interested in making this work. I travel throughout the country, and I find on the corporate side as well as the public sector side that many of our leaders throughout the Nation are interested in making this work. I think now that we have a clear direction from the top, that we will see an appreciable change in both the attitude and the results.

Mr. KOLBE. Well, let me try to take it from the macro, then, down to the micro. If I am a minority and seeking to open a new business in my community, in Tucson—I don't care whether it is a restaurant, a dry cleaning establishment, whatever it is, a small retail store—what is the biggest single problem I am going to face in getting that business going and making it successful?

ACCESS TO CAPITAL

Mr. BOLTON. I think the biggest problem that we have identified and others tell us is access to capital. It is critically important to get that initial investment capital. The average black-owned business starts with about $7,200, and the average non-minority business starts with about $16,000, in aggregate figures.

Mr. KOLBE. So there is a significant difference there.

Mr. BOLTON. There is a significant difference—

Mr. KOLBE. In both cases, if I might interrupt, in both cases with those, whether it is $7,200 or $16,000, would that capital not be mostly internally generated? I know what I hear from small business people, minority and non-minority capital alike, is that access to capital is the biggest problem they face.

Mr. BOLTON. Those numbers are usually internally generated capital—a second mortgage on the home, sell the automobile, borrow from family and friends—and usually it is just enough money to get the business in trouble, because you need the second and third rounds of financing to really be able to ground the business and have it take off. What is missing is some way of getting greater access to investment capital, and then having our commercial banks develop a more favorable attitude toward financing small businesses.

Mr. KOLBE. Yes, I concur with your assessment of what the biggest single problem is; I also hear this repeatedly from small business people, minority and non-minority alike. It seems to be a problem that is endemic.

It probably is not anything that is new. I think we have always had a problem with access to capital, but I think that it seems to be worse in this market right now, particularly in my State. The problems we have had with real estate and the problems that the banks are in, have virtually shut off access to capital for small businesses in our State. So I am very concerned about that, and I would like to see the kinds of programs that you are going to devise that will target this issue of capital access.

If I might, just a couple more questions. I was interested also in your comment about the fact that the commitment to programs that we developed 10 years ago has diminished over the last decade. You note, "Our program has suffered due to a lack of national policy and program definition." Do you think now we have that?

Mr. BOLTON. I think we certainly have the commitment, and so it is left to us and our creativity to work with the private sector and work with minority trade groups to formulate the right set of national programs. We are moving in that direction. I also mentioned in the statement two or three more initiatives that we have taken right in the Department of Commerce.

Working with former Secretary Maurice Stans, we are now engaged in very serious discussions with the International Franchise Association. We are using franchises as a major method for targeting commercial activities and businesses for the minority communities.

I think our national programs are being restored. There is a recognition that we need to be pro-active at the national level if we are going to make this work.

Mr. KOLBE. And I also concur with your statement which follows on there, that says that the MBDCs have been forced to rely heavily on walk-in clients. They have not been supported by pro-active national programs, and that is certainly my sense. While I spoke of the good work that the center in Tucson is doing, I think they are relying entirely on walk-in, and there doesn't seem to be anybody out there in the community that direct minorities to them. How are we going to change that?

Mr. BOLTON. We are proposing, and in fact we are implementing in Fiscal Year 1990 a program that catalyzes local leadership. We call it the Minority Business Opportunity Committees. We are implementing most of these where we have Federal Executive Boards, cities like Denver and San Francisco.

Essentially what we are doing is bringing the folks together who already have a responsibility and a duty as Federal executives to promote minority business enterprise, and we are financing the administrative staff that would provide the opportunity for those MBOCs, as we call them, to meet periodically and to develop their own local strategies. They consist of representatives of the Veterans Administration, the HUD area offices, EPA regional and area offices.

We are bringing them together in those localities, along with State and local officials, so that there is synergism, and so that they discuss how they are going to promote this program. We have six demonstration projects that we are implementing, and if that works well we would like to expand that program in 1991 and 1992.

Mr. KOLBE. I was interested in your comment about the commitment that you have to minority business development among Native Americans.

Mr. BOLTON. Yes.

Mr. KOLBE. Small Business Administrator Ms. Susan Engleiter was in my office last week, and she told me that one of her top priorities is to assist small businesses on the reservations and Native American-owned small businesses. Is there any coordination between you and Ms. Engleiter's office on this matter?

Mr. BOLTON. Yes, there is and there has been all along. SBA funds the Small Business Development Centers. Of course our local groups tend to provide one-on-one technical assistance, consultant-to-client kind of arrangements. The SBDCs often provide institutional training and educational type technical assistance.

What we do is refer clients between the two programs. If we have a client that we believe needs the kind of service that is offered by the SBDC, then we refer them. If they have clients that they believe they need to send to us, then they will refer them to us. So our programs are different, but we do coordinate them.

Mr. KOLBE. Well, it seems to me that if both agencies are going to make a major initiative in this area of Native Americans, that it would be important to make sure that the new efforts, the new initiatives, are dovetailed, that they serve to achieve the same end instead of just working at cross-purposes.

Mr. Chairman, I have some specific questions with regard to a grantee that is the supervising grantee for the Minority Business Development Center in Tucson, as the result of an audit that was recently done, but I will submit those for the record.

Mr. DWYER. Fine, Mr. Kolbe.

Mr. Bolton, we want to thank you very much for being here this morning. We may have a few additional questions to submit to you, and you can provide the answer for the record. Thank you.

Mr. BOLTON. Thank you, sir.

Mr. DWYER. And good luck to you.

Mr. BOLTON. Thank you.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Neal Smith

Enterprise Development

QUESTION:

You are requesting an increase of $3,774,000 for the Enterprise Development Program. Of this amount, $2,874,000 will be allocated to improving the quality of services provided by the Minority Business Development Centers. Specifically, how are you going to improve the quality of services provided by the Centers?

ANSWER:

MBDA has begun a three-tiered effort to increase the quality of services provided. In 1989 we conducted regional conferences that were aimed at identifying redirection strategies and management improvements. In 1990, the agency will conduct an in-depth national training program for the MBDCs to enhance the skill of the delivery system staffs to higher levels of expertise in the following areas:

- capital development
- business development
- advocacy and market share, and
- international trade.

In 1991, with the requested increases, the quality of the services by the MBDCs will be improved by increasing the amount of funding per staffyear (including overhead) by $7,000 to $10,000 over the current level. This increase will allow the MBDCs to attract and retain higher quality staff; those who have greater business expertise. It will also help to prevent staff turnover and give greater stability to the program.

Additionally, the MBDC program will be improved by reducing some of the administrative and programmatic burdens, such as reducing reporting requirements, improving grant application and renewal procedures, and by streamlining or reducing other program requirements which may no longer be cost effective. Project monitoring would be improved to include better client verification and verification of services provided.

QUESTION:

You are also proposing to implement a rural services program with additional resources of $390,000. How will this program be implemented?

ANSWER:

The rural assistance program will be implemented in a similar manner as the MBDC program; i.e., it will be a competitive program located in the rural areas of the country with the highest concentrations of rural minority population and rural minority businesses, as defined by the U.S. Department of Agriculture, which defines rural areas and rural businesses. We will work closely with Farmers Home Administration (FHA) to provide management and technical assistance to their loan applicants and recipients. However, MBDC's will provide services to all segments of rural MBE development in addition to FHA clients.

QUESTION:

You are requesting $510,000 to fund three additional Indian Business Development Centers. Are there specific segments of the Indian population that are not now covered by your Indian Business Development Center program?

a. What specific services do these centers provide for Indians?

ANSWER:

The three additional Indian Business Development Centers (IBDC), which we intend to fund, will be located in areas which we do not service with our current IBDC program because of fund limitations. Our fund allocation formula requires that we fund centers in areas with the highest concentration of Indian population, in descending order of population. The centers for which we are requesting additional funding will be located in areas with the next highest concentrations of Indian population. This will raise MBDA's presence in geographical service areas to include approximately 63% of the American Indian population.

The services provided by the IBDCs are as follows:

- Develop and maintain inventories of area resource opportunities, e.g., market, capital and business ownership.
- Broker resource opportunities between qualified Indian entrepreneurs and public and private sectors.
- Provide management and technical assistance to clients ranging from initial client consultations to the identification, analysis and resolution of specific business problems.
- Advocate with public and private sectors to obtain maximum support for the Indian business

community it services. An example, would be getting public and private sectors to make procurements under the Buy Indian Act.

Resource Development

QUESTION:

You are requesting an increase of $577,000 and six positions for the Resource Development Program. Are these resources needed because of additional workload, or because of new initiatives or responsibilities?

ANSWER:

The requested increase of six positions and $577,000 will be used for new and expanded initiatives.

In the Private Sector Programs for Resource Development, we will expand our capital development program to include:

- two specialists to address the two broad categories of debt and equity capital.

The capital market has become very specialized with debt and equity capital being separate and distinct areas. In an effort to increase minority business enterprise's (MBEs) access to capital we will identify and direct capital to MBEs through the network of MBDA funded organizations. This will require the services of separate specialists in these areas.

Our franchise initiative will be expanded to include:

- partnership agreements with various organizations within the franchising/distribution industries to increase minority ownership.

Since the franchise/distribution industries reduce the risk and uncertainty of new business starts, our plan is to make this industry more accessible to MBEs. To implement this, a specialist knowledgeable in the franchise/distribution industries is requested.

We plan to expand our International Trade Missions program. To do this we are requesting a total of $123,000, including one position.

The international market offers export opportunities, but MBEs have failed to impact the market in significant numbers. This is primarily due to the limited access of minority businesses export opportunities. To increase the exposure to the international market, we are proposing to do the following activities:

- participate, collaborate and promote trade missions that will educate minority businesses on the mechanics of exporting,
- identify minority firms to participate in matchmaker trade delegations,
- work with other departmental bureaus such as ITA, BXA, NIST, USTTA, and EDA to ensure that minority businesses take advantage of Commerce programs whose primary mission is to increase export opportunities for U.S. businesses,
- work with other Federal agencies such as the State Department and the Agency for International Development.

We are requesting $100,000 for our Trade Association initiative. Trade Associations act as advocates for their members as well as the minority business community. These Associations will function as part of MBDA's service network and supplement the other MBDC programs in responding to minority business needs.

Through this initiative, we will:

- participate with minority industry and trade associations to conduct activities designed to foster and strengthen networking among MBEs, and
- increase the accessibility of business opportunities for minorities.

In the Public Sector of Resource Development, we are requesting $149,000 including one position to implement a state and local initiative. We are proposing to:

- assist MBEs in gaining greater participation in public sector business opportunities,
- facilitate networking throughout specific areas of the country, to identify outreach, contracting, procurement and financial assistance opportunities, and
- encourage and pursue avenues to enhance access to more contracts and grants for the minority business community.

We propose to do this by targeting cities and states that are conducting economic revitalization programs for MBEs, fund a state or local organization to assist in the achievement of our goals, and advocate on behalf of MBEs at the state and local level.

We are requesting one position and $49 thousand to implement the agency's responsibilities under Executive Order 12432 and to coordinate our Minority Business

Opportunity Committee (MBOC) initiative. Based on the MBOCs still in existence and the success and effectiveness the Agency has had in previous years, we are planning to:

- actively coordinate all federal efforts to assist in MBE development, and
- fund demonstration projects in select cities to focus on such activities as recommercialization of inner cities.

Advocacy, Research and Information

QUESTION:

You are requesting an increase of $1,261,000 and two positions in your Advocacy, Research and Information Program. What are the specific elements of this increase?

ANSWER:

Advocacy

We are requesting $75,000 for necessary expenses of the Minority Enterprise Development Advisory Council. It will meet six times a year and is comprised of business experts from the public and private sectors. The council will advise the Secretary of Commerce on programs and policies relating to minority business enterprise.
Our request for $25,000 is to increase public awareness of MBDA programs.

Research

With $515,000 we will conduct policy analysis and program evaluation studies, particularly in the area of program impact evaluation. The program impact studies will investigate not only whether programs are meeting their objectives but also if they are having a positive impact on minority business development and economic development.

Information

We are requesting $500,000 to provide the F.W. Dodge Data Line information service of construction opportunities. This service is a tool that will be used by the MBDC network to identify construction contracts and subcontracting opportunities for their minority business clients. The Dodge system is one of the most economical approaches to assist in the estimation of construction jobs and exploration of market opportunities.

In addition, $146,000 and two positions are requested to establish the Minority Business Enterprise Information

Center (MBEIC). The MBEIC will serve as a clearinghouse for information for and about minority-owned businesses.

QUESTION:

The justifications indicate that $515,000 of this increase will be used to assess the program needs of minority-owned businesses. What is your current assessment of those needs and how will this increase improve your ability to make such assessments?

ANSWER:

Until now, our research program has focused on the nature and condition of minority enterprises and their problems. Our discovery included:

- Most minority-owned firms are still concentrated in industries with little growth potential.
- Many minority groups are hampered by low business formation rates.
- Access by minorities, to financial capital markets is limited.

Currently, we use this information to structure the development of policies and programs that will effectively address these issues. To insure program effectiveness it is important to evaluate them in the face of changing business and economic trends. Therefore, in addition to policy analysis, a portion of the requested increase will enable MBDA to expand its efforts to conduct impact evaluation studies of MBDA's programs as they relate to the following areas:

- Federal, state, local, and private minority business deve[illegible] programs.
- Regulatory, institutional, and discriminatory barriers to minority business development.
- Macro socioeconomic changes in the global economy, as they affect minority business development strategies.
- Strategic market development in high growth areas such as international trade and telecommunications.
- Federal strategies for urban recommercialization in minority communities.

Questions Submitted by Congressman Jim Kolbe

Currently the I.G. is conducting an audit of the operations of the Minority Business Development Center in Los Angeles. I have an interest in this audit, as the Center in Tucson is run by the same organization.

QUESTION:

What is the status of this audit? What led to the audit, was it simply a routine check?

ANSWER:

The Office of Inspector General (IG) has issued a draft audit report to the recipient for comments. The comments from the recipient are not due until April 10, 1990. The I.G. has informed us that when they undertake an audit it is a decision based on:

- their experience
- independent review of on-going operations and/or
- indications of financial, performance or other problems.

In this specific case, there were indications of financial and performance problems.

QUESTION:

How long is the audit process likely to continue? What effect can this have on other centers, such as the Tucson center?

ANSWER:

The audit process will continue until all issues surrounding the audit are resolved. Since this is a draft audit report, a final Departmental position will not be taken on the matter until the Department receives and analyzes the Foundation's comments to the final report. Therefore, we cannot at this time speculate on the effect this matter would have on other centers.

QUESTION:

The draft audit recommends debarment for the offenses. If this occurred what would be the effect on the other centers run by the Foundation? What steps will the MBDA take to ensure the operations of other centers are not adversely affected by the audit?

ANSWER:

On May 26, 1988, the Department of Commerce published a final "common" rule governing nonprocurement suspension and debarment. Publication of the rule was in accordance with Executive Order 12549, "Debarment and Suspension" issued February 18, 1986. This executive order directs that persons suspended or barred from doing nonprocurement business with one Federal agency should be suspended or barred from all agencies. MBDA will make every effort to ensure that services provided to clients of the other centers will continue.

QUESTION:

With finding problems in the L.A. center, what steps is the MBDA taking to improve oversight to avoid any similar problems in the future?

ANSWER:

MBDA has taken the following steps to improve oversight and to avoid similar problems in the future:

- Established a positive working relationship with staff members of the OIG.
- Improved communications and responsiveness with the Office of Financial and Federal Assistance, the Departmental arm in the grants approval process, via weekly staff meetings, and
- Improved internal procedures to include:
    a. monitoring projects to include better client and service verification.

    b. reducing administrative and program burdens in reporting requirements and grant application and renewal procedures, and

    c. streamlining or reducing other program requirements.

TUESDAY, MARCH 6, 1990.

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

WITNESSES

JANICE I. OBUCHOWSKI, ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION

DENNIS R. CONNORS, DIRECTOR, OFFICE OF POLICY COORDINATION AND MANAGEMENT

GAY G. SHRUM, ACTING BUDGET OFFICER

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. The next item that we will consider this morning is the Fiscal Year 1991 budget request from the National Telecommunications and Information Administration. The request for salaries and expenses appropriations is $15,252,000, an increase of $1,250,000 above the appropriations for Fiscal Year 1990. There is no request for the Public Telecommunications Facilities Planning and Construction appropriation. The sum of $20 million was appropriated for this item for Fiscal Year 1990. We will insert the budget justifications submitted in support of this request into the record at this point.

[The justifications follow:]

Department of Commerce
National Telecommunications and Information Administration

BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION
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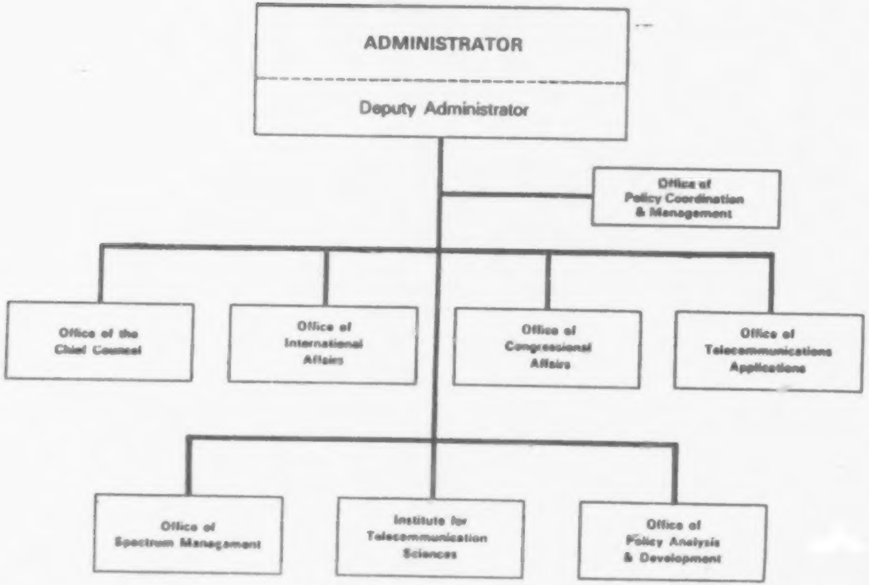
January 1990

U.S. DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration


ADMINISTRATOR
Deputy Administrator
Office of Policy Coordination & Management
Office of the Chief Counsel
Office of International Affairs
Office of Congressional Affairs
Office of Telecommunications Applications
Office of Spectrum Management
Institute for Telecommunication Sciences
Office of Policy Analysis & Development

GENERAL STATEMENT

Telecommunications, other media of mass communications, and information are vital to the future of this country. The information economy is currently a $330 billion industry, with domestic employment alone estimated at 2 million — it continues to be the fastest growing sector of both the U.S. and world economies. Our net national wealth in the telephone industry alone is estimated at $683.6 billion; $37.6 billion for television; and $70 billion for cable. To a large extent, U.S. Government telecommunication policies determine the ability of American companies to compete in this international market, and how free foreign entities are to compete in our domestic market. NTIA is the only executive agency whose major emphasis is communications — NTIA is assigned major responsibilities in this area by both law and executive order. NTIA's goals include: (1) developing and advocating policies to decrease regulation and increase competition in both domestic and international telecommunications marketplaces; (2) providing policy for and managing the efficient Federal use of the radio frequency spectrum, and (3) maintaining the U.S. leadership position in telecommunications technology.

The NTIA budget request for fiscal year (FY) 1991 is approximately $15.3 million, which is an increase of $370 thousand over the 1991 base program level to provide the fundamental technical data necessary for NTIA to develop and support leading policy decisions on Advanced Television Systems. This level of resources, which represents only a 2.4% increase, will also allow NTIA to continue its role in the telecommunications sector, both nationally and internationally. NTIA's three primary activities — policy development and advocacy (in both international and domestic fora), radio frequency spectrum management, and telecommunications research — will be advanced through this budget.

NTIA's primary activities have been examined in the past to ensure that only the highest priority efforts — the areas where NTIA can make the significant contribution — are being performed in a manner where the return on Federal resources is substantial. Within the current level of resources NTIA applies its expertise to issues where, initially, there is little Federal or private sector movement. A brief summary of NTIA's primary activities as well as the program initiatives follows.

First, NTIA's domestic policy work makes substantial contributions to major procompetitive decisions regarding telecommunications, broadcasting, and cable issues. NTIA's small domestic policy staff focuses on the highest priority areas where NTIA can have a significant impact on market activities and opportunities. Issues which NTIA addresses under current resources include modification of the Bell Operating Companies restrictions of the AT&T consent decree, cable television regulation, more efficient regulation of dominant carriers, open network architecture, and comparably efficient telephone interconnection. These issues are all vital for the promotion of a healthy economy. In 1990 NTIA will also begin to identify policies to promote development of an advanced telecommunications infrastructure that will meet further user needs and allow U.S. firms to compete effectively in domestic and international markets. In addition, NTIA will launch an examination of the domestic policy implications of the evolving use of the electromagnetic spectrum for telecommunications and mass media. Further, NTIA will begin to examine the globalization of markets for mass media and electronic information and the domestic policy implications for the U.S.

NTIA's international policy efforts focus on opening telecommunication markets which remain closed or restricted to American entrepreneurs. There has never been more emphasis on telecommunications trade issues. NTIA is in a unique position as the principal executive agency responsible for telecommunications matters to have productive and open discussions with counterparts worldwide. In the Omnibus Trade and Competitiveness Act of 1988, the only specific area highlighted is telecommunications. This Bill provides the weapons to be used to ensure U.S. firms have the opportunity to compete in foreign markets. NTIA has devoted significant resources in past years to the development of international policies which promote the diversity of facilities and services and effective competition and trade through deregulation, the reduction of barriers, and procompetitive policies. These policies are implemented through participation in multilateral and bilateral negotiations, developing country initiatives, in-country infrastructure studies, satellite policy efforts, and other international activities. Within these activities NTIA has initiated both market access efforts in industrialized countries and telecommunications development programs in developing countries and has documented positive results which have far outweighed the cost of these programs. In many cases, other nations perceive formal telecommunications trade talks as threatening; NTIA has been successful in achieving positive results by initiating telecommunications policy talks.

Second, NTIA is responsible for management of the federal use of the radio frequency spectrum. NTIA must ensure all Government needs for vital telecommunications can be satisfied, nationally and internationally, during peacetime and under emergency conditions. The majority of the radio frequency spectrum, approximately 86%, is shared between Government and non-Government sectors. There is a great deal of cooperation between the Federal Communications Commission (FCC), which is responsible for the private sector use of the spectrum, and NTIA. In light of technological growth, the advent of satellites, the emergence of developing nations, unprecedented demands on the allocation of the spectrum, the need for more rapid communications, and the transfer of large volumes of information, the national and international uses for radio frequency spectrum have increased and will continue to increase dramatically. To maximize the use of each band, both NTIA and the FCC must encourage more efficient and effective means of managing the spectrum. As more efficient uses of spectrum become prevalent, it will be possible to make available to new businesses the use of spectrum previously precluded.

Third, NTIA maintains a research program designed to keep the U.S. at the forefront of telecommunications technology and ensure that American firms have the knowledge available to stimulate product development, service initiation, and growth of the telecommunications industry. This program provides technical expertise and support to all NTIA activities, including policy development and implementation and radio frequency spectrum management. In addition to an emphasis on research results which can be readily applied by industry, this program also focuses on the development and implementation of international technical standards for telecommunications. Although the standards work involves a long lead time before fruition, it is essential to ensure that American industry is allowed to compete fairly. During FY 1990 and 1991 NTIA will be building the fundamental research base necessary to develop and advocate Executive Branch and U.S. positions on Advanced Television Systems.

The activities described above are funded through NTIA's Salaries and Expenses appropriation. The following is a comparison of the 1990 appropriated level with the 1991 budget request and related data on employment:

(Dollar amounts in thousands)

Appropriations	1990 Currently Available Perm. Pos.	1990 Currently Available Amount	1991 Estimate Perm. Pos.	1991 Estimate Amount	Inc. (+) or Dec. (-) Perm. Pos.	Inc. (+) or Dec. (-) Amount	Perm. Emp. 12/31
Salaries and Expenses....................	252	$14,882	256	$15,252	+ 4	+$ 370	232
Public Telecommunications Facilities, Planning and Construction.............	15	20,000	...	...	-15	- 20,000	13
Total..................................	267	$34,882	256	$15,252	-11	-$19,630	245

Highlights of 1991 Changes

Program Increases

NTIA is requesting an increase of $370,000 above the current program level. These funds will build upon technical and policy work begun in 1989 to provide research applications, policy analysis and development efforts to assure U.S. viability in advanced television systems. (The budget document discusses the initiative in detail).

Program Decreases

No funds are requested for Public Telecommunications Facilities, Planning and Construction. This program has provided grants for planning and construction of non-commercial telecommunications facilities in areas not previously served by public television and radio. Since over 95% of the United States currently receives broadcasting programming, no further funding is requested in 1991. Through FY 1989, this program has awarded grants totalling approximately $264 million.

Department of Commerce
National Telecommunications and Information Administration
Appropriation Language and Code Citations:

1. For necessary expenses, as provided for by law, of the National Telecommunications and Information Administration,

15 U.S.C. 1512
47 U.S.C. 305
47 U.S.C. 391
47 U.S.C. 606
47 U.S.C. 721

Section 5112(b) of the Omnibus Trade and Competitiveness Act of 1988, 102 Stat. 1107, 1430, authorizes the Secretary of Commerce in the investigation of conditions which affect the transmission of radio waves, compilation and distribution of information on the transmission of radio waves for use in frequency assignments.

15 U.S.C. 1512 authorizes the Secretary of Commerce to foster, promote and develop foreign and domestic commerce. The telecommunications industry is both an integral part of the Nation's commerce and a key mechanism on which much of the work relies. Activities undertaken by the Secretary to improve our telecommunications industry relate directly to the Secretary's mandate under 15 U.S.C. 1512.

47 U.S.C. 305 provides the authority to develop and set forth plans, policies and programs with respect to telecommunications for frequency assignment and allocation.

47 U.S.C. 391 as amended by the Consolidated Omnibus Budget Reconciliation Act of 1985, (P.L. 99-272) authorizes the Secretary of Commerce to use appropriated funds for the administrative support of the Public Telecommunications Facilities Grant Program. Amounts are authorized for fiscal years 1989, 1990 and 1991.

47 U.S.C. 606 provides the authority for the telecommunications emergency preparedness functions.

47 U.S.C. 721 provides the authority in the planning and development of a national program for the establishment and operation of a commercial communications satellite system.

2. $15,252,000 to remain available until expended.

Additional authorizing legislation to be proposed.

05-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

		Personnel	Amount	Personnel	Amount
Appropriation enacted, 1990					$14,200
Sequester applied, 1990			(198)		
Summary of adjustments to base:					
Appropriation currently available, 1990	Pos/BA			180	14,002
	FTE/Obl.			186	14,002
FY 1991 Adjustments to base:					
Non-recurring adjustment	Pos/BA	0	150		
	FTE/Obl.	1	150		
Adjustment for 1990 pay increase and related costs		0	323		
Other cost changes		3	407		
Subtotal, adjustments to base:				0	880
				4	880
1991 Base	Pos/BA			180	14,882
	FTE/Obl.			190	14,882

Page No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA-16	Domestic and international policies:											
	(a) Domestic policies	Pos/BA	9	$844	9	$864	9	$918	13	$1,288	4	$370
		FTE/Obl.	(13)	(934)	(10)	(890)	(10)	(918)	(13)	(1,288)	(3)	(370)
	(b) International policies	Pos/BA	14	1,572	14	1,609	14	1,699	14	1,699	0	0
		FTE/Obl.	(22)	(1,734)	(15)	(1,659)	(16)	(1,699)	(16)	(1,699)		
	Subtotal	Pos/BA	23	2,416	23	2,473	23	2,617	27	2,987	4	370
		FTE/Obl.	(35)	(2,668)	(25)	(2,549)	(26)	(2,617)	(29)	(2,987)	(3)	(370)

Page No.	Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
NTIA-27	Spectrum management:											
	Spectrum plans and policies	Pos/BA	19	1,662	18	1,638	18	1,720	18	1,720	0	0
		FTE/Obl.	(13)	(1,773)	(19)	(1,698)	(19)	(1,720)	(19)	(1,720)		
	Spectrum management analysis and operations	Pos/BA	100	6,294	102	6,438	102	6,753	102	6,753	0	0
		FTE/Obl.	(99)	(6,310)	(105)	(6,438)	(105)	(6,753)	(105)	(6,753)		
	Subtotal	Pos/BA	119	7,956	120	8,076	120	8,473	120	8,473	0	0
		FTE/Obl.	(112)	(8,083)	(124)	(8,136)	(124)	(8,473)	(124)	(8,473)		
NTIA-36	Telecommunication sciences research:											
	Spectrum research and analysis	Pos/BA	18	1,798	19	1,772	19	2,019	19	2,019	0	0
		FTE/Obl.	(23)	(1,635)	(20)	(1,772)	(22)	(2,019)	(22)	(2,019)		
	Systems and networks research and analysis	Pos/BA	12	1,460	18	1,681	18	1,773	18	1,773	0	0
		FTE/Obl.	(19)	(1,513)	(17)	(1,705)	(18)	(1,773)	(18)	(1,773)		
	Subtotal	Pos/BA	30	3,258	37	3,453	37	3,792	37	3,792	0	0
		FTE/Obl.	(42)	(3,148)	(37)	(3,477)	(40)	(3,792)	(40)	(3,792)		
	Direct Obligations	Pos/BA	172	$13,630	180	$14,002	180	$14,882	184	$15,252	4	$370
		FTE/Obl.	(189)	(13,899)	(186)	(14,162)	(190)	(14,882)	(193)	(15,252)	(3)	(370)

05-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by Activity	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
NTIA-16 Domestic and international policies:										
(a) Domestic policies....	0	$0	0	$0	0	$0	0	$0	0	$0
(b) International policies............	0	0	0	0	0	0	0	0	0	0
Subtotal.................	0	0	0	0	0	0	0	0	0	0
NTIA-27 Spectrum management:										
Spectrum plans and policies.................	0	0	0	0	0	0	0	0	0	0
Spectrum management, analysis and operations...............	0	255	0	0	0	0	0	0	0	0
Subtotal.................	0	255	0	0	0	0	0	0	0	0

05-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by Activity	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
NTIA-36 Telecommunication sciences research:										
Spectrum research and analysis..............	28	3,102	24	3,000	24	3,000	24	3,000	0	0
Systems and networks research and analysis..............	39	3,776	56	3,800	56	3,800	56	3,800	0	0
Subtotal..................	67	6,878	80	6,800	80	6,800	80	6,800	0	0
Reimbursable Obligations..........	67	$7,133	80	$6,800	80	$6,800	80	$6,800	0	$0

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease)
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$21,032	$20,962	$21,682	$22,052	$370
Financing:					
Offsetting collections from:					
Federal funds - OSM	(255)	0	0	0	0
Federal funds - ITS	(6,638)	(6,650)	(6,650)	(6,650)	0
Non-Federal sources - ITS 1/	(240)	(150)	(150)	(150)	0
Recoveries	0	0	0	0	0
Unobligated balance, start of year	(527)	(160)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	160	0	0	0	0
Unobligated balance lapsing	98	0	0	0	0
Budget Authority	13,630	14,002	14,882	15,252	370
Transferred to /from other accounts	0	0	0	0	0
Sequester		198	0	0	0
Appropriation	13,630	14,200	14,882	15,252	370

1/ Non-Federal users of the Telecommunications Analysis (T.A.) Services program.

11-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

	FTE	Amount
ADJUSTMENTS:		
Non-recurring costs	1	150
Subtotal	1	150
ESTIMATED COST CHANGES:		
Positions funded for part year in FY 1990	1	22
1990 Pay raise	0	323
1991 Pay raise	0	202
One more compensable day	0	36
Within-grade step increases	0	0
Federal Employee's Retirement contributions - Basic	0	7
Federal Employee's Retirement contributions - Thrift Plan	0	1
Civil Service Retirement contributions	0	(3)
Federal Insurance Contributions Act - OASDI	0	7
Federal Insurance Contributions Act - Medicare	0	3
Health insurance premium	0	104
Employees' Compensation Fund	0	6
Total, Personnel compensation and benefits	1	708
Travel and transportation of persons	0	0
Transportation of things	0	0
Rental payments to GSA	0	56
Rental payments to others	0	0
Communications, utilities and miscellaneous charges	0	(58)
Printing and reproduction	0	3
Other services - Other Contracts	0	0
Other services - Working Capital Fund	0	17
Supplies and materials	0	4
Equipment	0	0
Subtotal	1	730
Total	2	880

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
Justification of Adjustments to Base
(Dollar amounts in thousands)

	FTE	Amount
Non-recurring Adjustment:		
RSMS Van:..	1	150

The Radio Spectrum Measurement System (RSMS) was established to provide a pragmatic understanding of the extent to which radio, radar, and related services actually use the spectrum. The RSMS is a mobile, special purpose receiving unit with the equipment and computer control necessary to make reliable and comprehensive measurements of radio frequency spectrum use. These measurements provide spectrum planners with a realistic understanding of the electromagnetic environment and the extent to which future planners can utilize the spectrum resource. The sophisticated and expensive equipment used for these spectrum measurements is housed in a van that is 18 years old, worn out and of possible danger to agency personnel. Based on a comprehensive study, NTIA has determined that a modified motor-home type system would best meet the requirements of cost economy and effectiveness to the government. The replacement of the RSMS chassis and associated costs will allow NTIA to continue to operate at the same level and protect the sensitive equipment currently housed in the van. This adjustment does not provide an increase to NTIA's current capabilities or a change of current services, but rather, a continuation of service disrupted by events outside the control of agency management.

NTIA is requesting an adjustment to base to cover the cost of replacing the RSMS van. In the replacement, an electronics technician is needed to oversee the modifications to the new van chassis and to install the equipment.

1 GS-11 Electronics Technician at $28,852, lapsed 25%, times personnel benefits 26.95%......... 27,471

The replacement of the RSMS van will require some modifications to the chassis so that the specific spectrum measurement equipment will fit. The contract for this will be approximately $28,000. NTIA is requesting a non-recurring adjustment for the cost of this contract.

The cost of a new mobile van chassis to replace the RSMS van will be $86,000. Auxillary equipment such as racks and power sources will be approximately $9,000. NTIA is requesting a non-recurring adjustment to base for the cost of this equipment.

Other Increases:

	FTE	Amount
Full year cost in 1991 of positions financed for part year in 1990....................................	1	22

An increase of $11,144 is required to cover the salary and benefits costs financed for part year in FY 1990.

	FTE	Amount
Annual salary of new positions in the FY 1990 Appropriation enacted......................	4	180,040
Less lapse (5%)..	0	-9,002
Full year cost of personnel compensation..	4	171,038

Personnel Benefits		+ 44,941
Full year cost of personnel compensation and benefits		215,979
Compensation and benefits included in 1990 appropriation	-1	-194,000
1991 Adjustment to base	1	+ 21,979

Adjustment for 1990 pay increase and related costs:	0	323

Total cost in 1990 of pay increase	0	$242
Less amount absorbed in FY 1990	0	-242
Anticipated FY 1990 pay increase supplemental	0	0
Amount in FY 1991 to provide full-year cost of pay increase	0	323
Less amount absorbed in FY 1991	0	0
Subtotal, adjustment for 1990 pay increase	0	$323

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, the National Telecommunications and Information Administration is absorbing the full cost of this pay increase.

Adjustment for 1991 pay increase and related costs:	0	202

Total cost in 1991 of general pay increase	0	$252	
Less amount absorbed in FY 1991	0	-126	
Subtotal, adjustment for 1991 general pay increase	0		126
Total cost in 1991 of SES pay increase	0	152	
Less amount absorbed in FY 1991	0	- 76	
Subtotal, adjustment for 1991 SES pay increase	0		76
Total adjustment for 1991 pay increases	0		$202

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

One more compensable day	0	36

There is one more compensable day in FY 1991 than in FY 1990, therefore the cost per compensable day was calculated by dividing the 1990 estimate for personnel compensation and benefits, less overtime, awards, health insurance, and Employee's Compensation Fund, by 260 compensable days for an increase of $36,031.

Federal Employee's Retirement System	0	8

The number of employees covered by the Federal Employees' Retirement System (FERS) will continue to rise as employees covered by the Civil Service Retirement System (CSRS) leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll of eligible employees participating in FERS will rise from 32.3% in 1990 to 32.9% in 1991. In addition, the agency's contribution for basic benefits will rise from 12.97% to 13%. The calculations for increases in basic benefits are on the following page:

Payroll subject to retirement systems ($7,899,000)	
Basic benefit cost in 1990 ($7,899,000 x .323 x .1297)	330,914
Basic benefit cost in 1991 ($7,899,000 x .329 x .1300)	337,840
Increase in basic benefit contributions (1991 - 1990)	+ 6,926

The cost of agency contributions to the Thrift Savings Plan will also rise as FERS participation increases. The increased costs for contributions to the Thrift Savings Plan are:

Payroll subject to retirement systems ($7,899,000)	
FERS Thrift Savings Plan enrollees in 1990 ($7,899,000 x .323 x .02)	51,028
FERS Thrift Savings Plan enrollees in 1991 ($7,899,000 x .329 x .02)	51,975
Total Thrift Savings Plan Increase (1991 - 1990)	+ 947

Federal Insurance Contributions Act (FICA)	0	10

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises, the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in FY 1991 from $50,025 in FY 1990, and the OASDI tax rate will increase from 6.17% in FY 1990 to 6.20% in 1991. This will result in an increase of $9,982 as follows:

OASDI:

FERS payroll subject to FICA tax in 1990 (7,899,000 x .323 x .8896)	2,269,704	
FERS OASDI tax in 1990 (2,269,704 x .0617)		140,040
FERS payroll subject to FICA tax in 1991 (7,899,000 x .329 x .9118)	2,369,559	
FERS OASDI tax in 1991 (2,369,559 x .0620)		146,913
Increase (1991 - 1990)		+ 6,873
Other payroll not covered by retirement systems	300,000	
Other payroll subject to FICA tax in 1990 (300,000 x .8896)	266,880	
OASDI tax in 1990 (266,880 x .0617)		16,467
Other payroll subject to FICA tax in 1991 (300,000 x .9118)	273,540	
OASDI tax in 1991 (273,540 x .0620)		16,959
Increase (1991 - 1990)		+ 492
Total OASDI increase		+ 7,365

Medicare:

All employees are subject to medicare contributions. The contribution rate will remain at 1.45%, but the percentage of payroll subject to FICA will increase from 88.96% in 1990 to 91.18% in 1991. The cost of Medicare will increase as follows:

Total payroll	8,130,000	
Total payroll subject to FICA in 1990 (8,130,000 x .8896)	7,232,448	
Total payroll subject to FICA in 1991 (8,130,000 x .9118)	7,412,934	
Increase in payroll subject to FICA (1991 - 1990)	+180,486	
Increase in Medicare tax (180,486 x .0145)		+ 2,617

Health Insurance Premium 0 104

Health insurance premiums have increased an average of 28.0%. Applied to the 1990 Base estimate of $373,000, NTIA requests an adjustment of $104,440.

Employees' Compensation Fund 0 6

The increase in the repayment to the Employees' Compensation Fund is the result of higher costs in the year ending June 30, 1989 than in the year ending June 30, 1988. The 1989 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in 1991, pursuant to P.L. 86-767, as amended.

GSA Rent 0 56

GSA rent costs have increased by $56,000 over the 1990 base of $1,259,000.

Printing and reproduction 0 3

The Government Printing Office (GPO) notified the Department of Commerce that agencies should expect a 7% increase in GPO printing costs from 1990 to 1991. Based on actual GPO charges (from 10-1-87 to 3-31-89) NTIA's GPO costs are approximately 26.9% of the total printing costs. Applying that percentage, NTIA's Base costs for GPO in FY 1991 are $50,034 times the 7% increase for an adjustment of $3,000.

1990 GPO Printing Costs (185,000 x .269)	49,765	
1991 GPO Printing Costs (185,000 x .269 x .07)		3,484

Other services 0 17

Based on estimates provided by the DOC Working Capital Fund for FY 1991 services, NTIA requests an adjustment of $17,000 to maintain the current level of operation.

Supplies and Materials 0 4

Continued inflation in the price of supplies, materials and publications is a significant factor that must be considered to prevent a serious reduction in the current level of supplies and services. This increase was calculated by applying the GNP deflator of 4.0% to the 1990 estimate of $158,000 for an adjustment of $6,320. NTIA will absorb one-third, or $2,106, for a requested adjustment of $4,214.

Other Decreases:

Civil Service Retirement System (CSRS) 0 (3)

The number of employees covered by the Civil Service Retirement System (CSRS) will continue to drop as positions become vacant and are filled by employees who are covered by FERS. We estimate the percentage of payroll will drop from 67.7% in 1990 to 67.1% in 1991. This will result in a decrease of $3,318.

Payroll subject to retirement systems ($7,899,000)	
Basic benefit cost in 1990 ($7,899,000 x .677 x .07)	374,334
Basic benefit cost in 1991 ($7,899,000 x .671 x .07)	371,016
Increase in basic benefit contributions (1991 - 1990)	- 3,318

FTS-2000	0	(58)

Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

05-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Direct Obligations in thousands)

Activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Domestic and international policies:											
(a) Domestic policies.........	Pos/BA	9	$844	9	$864	9	$918	13	$1,288	4	$370
	FTE/Obl.	(13)	(934)	(10)	(890)	(10)	(918)	(13)	(1,288)	(3)	(370)
(b) International policies..................	Pos/BA	14	1,572	14	1,609	14	1,699	14	1,699	0	0
	FTE/Obl.	(22)	(1,734)	(15)	(1,659)	(16)	(1,699)	(16)	(1,699)		
Total.........................	Pos/BA	23	$2,416	23	$2,473	23	$2,617	27	$2,987	4	$370
	FTE/Obl.	(35)	(2,668)	(25)	(2,549)	(26)	(2,617)	(29)	(2,987)	(3)	(370)

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Domestic and International Policies

Goals and Objectives

Goals:

- Promote competition and efficiency in telecommunications markets.
- Promote the widespread availability of advanced information services.
- Promote the deployment of advanced technologies in U.S. telecommunications networks and increase production of U.S. industry.
- Promote diversity of telecommunications facilities (e.g. cable, satellite, earth stations, fiber optics), services (e.g., cable television, data processing and transmission) and ownership.
- Promote T&I technological development and incentives for diverse information distribution while protecting data security and privacy.
- Minimize foreign barriers to U.S. telecommunications goods and services through successful participation in bilateral and multilateral forums.
- Protect and promote through international deliberative bodies, U.S. interests in the planning and management of international T&I facilities and services.

Objectives:

- Formulate and advocate legislative, regulatory, technical, strategic and institutional plans and policies to the President, within the Executive Branch and before the Congress, the FCC, relevant industries, and domestic and international organizations to:
  - promote effective competition among and deregulation of existing and emerging information distribution systems (e.g. cable television, communication satellites, low-power television, multichannel multipoint distribution systems) where feasible;
  - promote the universal availability of basic telephone service at affordable rates;
  - promote increased minority ownership and operation of telecommunications facilities;
  - encourage the development of diverse T&I services and distribution mechanisms;
  - participate in creating international agreements to eliminate barriers to trade in T&I equipment and services; and

  - develop, in conjunction with other Federal agencies, strategies and programs to reduce obstacles which impede the growth and stability of U.S. T&I industries and trade.
- o Participate in U.S. facilities planning efforts and mandated oversight of Communications Satellite Corporation (COMSAT) activities.
- o Maintain an effective dialogue with the U.S. T&I industry on international issues.
- o Develop U.S. proposals/positions for and participate in international radio conferences.

Base Program

This activity is concerned with developing policies which will improve domestic and international services provided by the U.S. telecommunications industry. The Communications Act of 1934 and its amendments provide a base for the regulation of this industry to protect the public interest. However, existing law, regulation, and administrative procedures are subject to enormous pressures from revolutionary changes in technology and more diverse and intense demands for services. NTIA is the Executive Branch agency principally responsible for developing and recommending policies to the Congress and the FCC. These recommendations promote greater diversity of services through the application of technology and effective competition. By minimizing regulation, services can be made available to the public in a timely manner at reasonable cost.

NTIA's effort in this activity is organized to treat the unique features and regulatory issues of various aspects of the telecommunications industry. Within the domestic policies subactivity, methods are developed to reduce unnecessary regulation, increase competition and diversity of services in the T&I industries, and increase minority ownership and participation. In the international policies area, NTIA possesses expertise in four essential areas: 1) technical skill; 2) an understanding of the U.S. domestic telecommunications environment, products, services, and regulatory policies; 3) an understanding of U.S. trade objectives; and 4) an understanding of the international telecommunications market. With this expertise, NTIA develops policy recommendations aimed at improving international T&I services. NTIA also participates in and advocates our national policies before international organizations and in bilateral consultations and negotiations.

Domestic Policies

NTIA's domestic policy recommendations have made substantial contributions to major procompetitive decisions regarding broadcasting, cable and telephone issues, which have had a great impact on the U.S. economy. The purpose of these programs is to search for marketplace alternatives to government regulations and advocate them before regulatory bodies and the Congress. The range of domestic policy issues is dynamic and complex, reflecting the rapid changes in telecommunications technology and its application to the marketplace.

The common carrier industry is a major focus of NTIA's efforts. While supporting the universal availability of basic common carrier services, NTIA advocates policies and proposals that promote the efficient provision of telecommunication services and the reduction of competitive barriers. When the original industry legislation (Communications Act of 1934) was written, it was difficult to anticipate that technology would advance as rapidly as it has, and that these advances would have such significant effects on the competitive environment of the industry. In addition, communications and data processing technology have, in many respects, merged and, therefore, regulatory questions such as who should provide what services and under what conditions are made extremely complex and difficult. NTIA fulfills its role in this area by 1) working with the Congress and the FCC in examining innovative services to ensure that they are provided in a competitive environment; and 2) ensuring that the Government does not create regulatory barriers which burden the provider or receiver of these services.

In FY 1990, NTIA's efforts will focus on recent changes in the domestic common carrier industry, including the AT&T divestiture and the FCC's Third Computer Inquiry which are generating significant new questions of telecommunications policy. NTIA will participate in any relevant FCC proceedings and Congressional action which may occur in FY 1990 as a result of the AT&T Consent Decree court's recommendations. NTIA will also examine proposals and present recommendations to ensure competitors open access to the local telephone network as required under the Third Computer Inquiry. Based upon examination of alternatives to current cost allocation and telephone pricing policies, NTIA will also advocate procompetitive policies to Federal and state officials which will promote greater economic efficiency, while at the same time, ensure affordable basic telephone service. Also in 1990, NTIA will begin to identify policies to promote development of an advanced telecommunications infrastructure that will meet future user needs and allow U.S. firms to compete effectively in domestic and international markets.

By FY 1991, many of the significant issues involved in the implementation of the AT&T divestiture will have moved further towards resolution, and competition in the telecommunications industry will have increased substantially. However, NTIA will continue to be involved in FCC proceedings and Congressional action on the provision of local exchange access and regulatory reform. Additionally, NTIA will undertake research efforts that will form the basis of both FCC filings and legislative proposals. NTIA will continue to assess the implications of advanced telecommunications networks and standards development and participate in regulatory and policy proceedings implementing new services. NTIA will also examine domestic policy implications of the evolving use of the electromagnetic spectrum for telecommunication and mass media.

In FY 1990, NTIA will examine the globalization of markets for mass media and electronic information and the domestic policy implications of these trends for the U.S. In FY 1990, NTIA will continue to pursue opportunities for deregulation of the mass media industries, developing and supporting proposals to: (1) eliminate unnecessary or outmoded regulation; and (2) increase competition among and minimize regulation of emerging and existing information and entertainment systems (e.g., cable television, direct broadcast satellites, low-power television, multichannel multipoint distribution systems). NTIA also will continue to advocate policies which foster technolcgical developments in existing mass media services [e.g. High Definition television (HDTV)].

By FY 1991, efforts to deregulate the mass media industries may have some success and competition from emerging and existing distribution systems should make the market for information services, entertainment programming, and enhanced interactive services (e.g. alert and alarm systems, and home shopping and banking services) more vigorous. NTIA will continue to provide the FCC and Congress with analysis and assistance concerning new and emerging issues.

In FY 1990, NTIA will seek ways to enhance minority participation in telecommunications. Specific efforts which will continue through FY 1990 and FY 1991 include: (1) conducting initial engineering assessments to identify potential areas for minority broadcast ownership; (2) recognizing outstanding accomplishments by minority participants in the telecommunications and media areas; (3) providing assistance and disseminating information on ownership opportunities in telecommunications; (4) conducting seminars to help minority telecommunications entrepreneurs compete more effectively in the private sector; (5) developing and commenting on legislative and regulatory proposals which promote minority ownership in telecommunications; (6) providing assistance to minorities interested in business opportunities in the international arena, and (7) working with industry, and other government agencies on initiatives to increase public/private sector assistance to minorities interested in ownership of telecommunications businesses and services.

In FY 1991, NTIA will continue to address intellectual property issues such as copyright, theft of information and services and computer software.

International Policies

The Secretary of Commerce is charged by Executive Order 12046 with developing and setting forth plans, policies and programs which relate to international telecommunications issues, conferences, and negotiations. The Secretary of Commerce is also responsible for coordinating economic, technical, operational and related preparations for U.S. participation in international telecommunications conferences and negotiations. As the President's principal advisor on T&I policy, NTIA actively participates in bilateral and multilateral discussions to advance U.S. interests in the global arena and is responsible for the regulatory proceedings affecting both satellite and terrestrial facilities and services. Guided by the basic principles of the free flow of information and marketplace competition, NTIA works to promote the diversity of facilities and services and effective competition and trade through deregulation, the reduction of barriers, and procompetitive policies.

NTIA continues to hold meetings with select groups of business users of international telecommunications and associations to identify international telecommunications problems confronting the U.S. business community. When Government assistance is needed and justified, NTIA assumes leadership for remedial action which may include inter- and intra-agency efforts, discussions with foreign administrations, and policy development.

The promotion of U.S. telecommunications equipment and services competition faces continuing and, in many cases, more sophisticated overseas resistance; intensified efforts by nations to erect or sustain non-tariff barriers must be confronted and reversed. In FY 1990 and 1991, NTIA will continue its efforts to act as a catalyst within the Government to identify non-tariff barriers and to formulate Government actions necessary to eliminate non-tariff barriers. This strategy is necessary to maintain the competitiveness of U.S. industry and to ensure that U.S. firms have mutually advantageous market opportunities in foreign markets.

The Telecommunications Trade Act of 1988, enacted in August 1988, for the first time outlines U.S. policy goals for international telecommunications trade. In order to implement the Telecommunications Trade Act, NTIA coordinates with the International Trade Administration and other Government agencies to actively participate in telecommunications talks focusing on select foreign countries in Europe, Asia and Latin America with significant market opportunities for U.S. providers of telecommunications goods and services. Within the telecommunications community, NTIA is recognized for its unique capability to blend domestic and international telecommunications considerations with sound, innovative technological approaches. Characteristic of the dynamic changes at work is the increased emphasis placed on telecommunication trade and the in-depth expertise NTIA brings to bear in supporting market access opportunities sought by American industry and the U.S. trade community. Familiar with U.S. domestic regulatory policies of foreign administrations, NTIA has contributed extensively to market opening initiatives in such countries as the Federal Republic of Germany, France, Italy, Spain, Japan, the Republic of Korea, and the People's Republic of China. In FY 1990 and FY 1991, potential foreign markets will continue to be studied to identify sales opportunities and trade barriers for U.S. telecommunications exports. Particular on-going attention is focused on linking increased market opportunities in Southeast Asia with activities (conferences, reverse missions for foreign officials, etc.,) by NTIA and other USG agencies that demonstrate to U.S. industry the nexus of telecommunications policy and trade policy and signals to foreign governments (e.g., ASEAN) that U.S. industry and government are working together to increase industry's share in lesser-known, burgeoning markets. An ASEAN conference is planned for FY 1990, and missions of foreign officials to the U.S. are planned for FY 1990 and FY 1991.

If U.S. industry continues to face barriers in foreign markets, the USG will conduct negotiations to resolve these barriers. NTIA's experience in technical assistance and telecommunications policy development and liaison activities positions NTIA to play a significant role in these consultations and negotiations.

NTIA participates in the interagency process regarding all issues pertinent to the Free Trade Agreement with Canada. These activities include preparation for dispute settlement consultations with the Canadian Government on the retransmission issue, discussions initiated by Canada on extending the U.S. 150 mile zone for compulsory licenses and discussions on alleged inadequacies in U.S. copyright remuneration for French Canadian programming.

In FY 1990 and FY 1991 NTIA will continue to encourage countries and regional organizations to pursue liberalization measures within their telecommunications markets. NTIA will develop and present U.S. policies and positions in international organizations such as the Organization of Economic Cooperation and Development (OECD) and the International Telecommunication Union (ITU) that deal with T&I issues and will present Executive Branch views regarding deregulation, the benefits of competition, the free flow of information, and free and fair trade within these fora. This activity requires on-going research identifying international trends in the international economic and regulatory environment, liaison with U.S. industry groups in the U.S. and overseas, the preparation of position papers and policy recommendations, and regular participation in interagency meetings on international T&I issues. NTIA will also continue to contribute to USG deliberations on formulating a position on sectoral coverage and definitions for a GATT agreement on T&I services. NTIA will continue to participate in DOC recommendations for the present Uruguay Round which will be completed by the end of FY 1990.

NTIA recognizes both the need for expanded telecommunications markets for U.S. firms and the growing market potential for U.S. firms in developing countries. In FY 1990 NTIA will continue to seek innovative ways to assist in the expansion of telecommunications infrastructures in developing countries, thereby expanding potential export markets for U.S. suppliers of goods and services. Cooperative efforts with U.S. trade associations (e.g., the Telecommunications Industry Association and the U.S. Telephone Association), other representatives of U.S. industry and appropriate Government agencies will continue to assist developing countries in their communications infrastructure development and to enhance market access for U.S. industry.

NTIA provides a focal point for monitoring policy oversight for Executive Branch activities in international organizations as mandated by Executive Order 12046. The U.S. is a member of the International Telecommunication Union (ITU) which is the United Nations specialized agency for international communications matters. The ITU is involved in all aspects of communications including the specification and registration of frequency bands for use by different radio services and stations, operational procedures governing international communications, the use of the geostationary orbit, and the development of standards for all member nations. In FY 1990 and FY 1991 NTIA will continue to be actively involved in all aspects of the work of the ITU, providing expert technical and policy guidance at meetings of specific ITU CCITT Study Groups and Working Parties. These activities have a direct impact on the U.S. in terms of trade, economic, political and domestic and international regulatory issues.

International telecommunications issues are growing in complexity due to the rapid application of new technologies. In essence, new technology creates opportunity for providing services and equipment on a competitive basis thereby challenging traditional monopoly concepts and practices. Historically, ground rules for the provision of telecommunications have been established by the ITU, often in treaty form. While the ITU remains a vital forum, bilateral arrangements and negotiations are of increasing importance as the U.S. seeks to consolidate views and operating practices with other like-minded industrial countries. In these negotiations in FY 1990 and FY 1991, NTIA will present the U.S. views and determine other nations' preliminary positions. These discussions will assist in the development of strategies and tactics to counter the increasing politicization occurring within the ITU. In both FY 1990 and FY 1991, NTIA will prepare for several important conferences. The Plenipotentiary Conference held in May-June, 1989 determined that major World Administrative Radio Conferences will be held in 1992 and 1993. NTIA will assume a leading role in the preparation of U.S. positions at these conferences in 1990 and 1991. Also in 1990 and 1991, NTIA will prepare for the annual sessions of the ITU Administrative Council which establishes and oversees the expenditure of funds, personnel resources, technical cooperation, and other management aspects of the ITU. In addition, NTIA will actively participate in the ITU activities directed at a major restructuring of the ITU.

NTIA plays a significant role in ensuring the competitiveness of U.S. satellite equipment and service providers internationally. NTIA will continue to promote competition within international satellite communications and other transmission media. By statute, the President is charged with overseeing COMSAT's participation in the International Telecommunications Satellite Organization (INTELSAT) (COMSAT is the U.S. signatory to INTELSAT). This responsibility, in large measure, has been delegated to DOC by Executive Order 12046. The Department is also charged by statute with overseeing COMSAT's participation in the International Maritime Satellite Organization (INMARSAT). To carry out these responsibilities, it is necessary to analyse all INTELSAT and INMARSAT documents in advance of action items, develop and present NTIA's views, and work with senior level representatives of the FCC and the Department of State to formulate and present to COMSAT appropriate instructions on particular agenda items which affect U.S. interests. In FY 1990 and 1991, NTIA will continue to monitor COMSAT's implementation of the revised instructional process to ensure that members of the affected industries have adequate opportunity for input into the instructional process. NTIA will accept written comments from interested parties on INTELSAT and INMARSAT agenda items, and will factor those inputs into the formulation of instructions to COMSAT. NTIA will determine if any deficiencies exist in the instructional process and will develop proposals for making the process more accessible to members of the affected industries, if such action is required. To fullfill these functions and to ensure the competitiveness of the U.S. satellite industry, NTIA tracks developments in satellite technology and developments in the international market for satellite equipment and services.

NTIA participates in FCC sponsored international facilities planning activities including domestic sessions and international meetings. This includes extensive NTIA participation in working groups involved in such issues as determining the basic configuration of international transmission facilities; examining methodologies for distributing international telecommunications traffic among various cable and satellite facilities; and examining various cost methodologies that could be factored into the facilities planning process. After consultation with U.S. manufacturers, service providers, users, and Executive branch agencies, NTIA presents Executive Branch recommendations and proposals to these Working Groups.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
INCREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Inc.(+)/Dec.(-)	
		Perm.	Amount	Perm.	Amount	Perm.	Amount
Domestic Policies..	Pos./BA	9	$ 918	13	$1,288	4	$ 370
	FTE/Obl.	10	918	13	1,288	3	370

Advanced Television Systems (+3 FTE, +$370,000)- This initiative consists of the identification, analysis and development of ways to strengthen U.S. industrial competitiveness in the Advanced Television (ATV) marketplace nationally and internationally. Specifically, this initiative will provide the intensive research applications, policy analysis and development efforts needed to determine and support the appropriate Government action to assure viability of U.S. interests in advanced television and related technologies such as high resolution imaging and computer software and hardware advances.

ATV presents a complex set of policy issues for government. From a communications policy perspective, ATV presents several challenges: consideration of high definition television (HDTV) production standards by the International Radio Consultative Committee (CCIR) of the International Telecommunication Union; the selection of a domestic HDTV transmission standard; and the resolution of key domestic radio-frequency spectrum allocation issues. In addition to these policy concerns, both Congress and the Executive Branch have been viewing ATV-related technologies in terms of international trade, national security, and the enhancement of U.S. industrial competitiveness. Recent Congressional initiatives include legislative proposals to reform the antitrust laws and to provide direct funding for the development or manufacture of ATV-related technologies, and hearings have been conducted on the need to pursue additional strategies for the enhancement of U.S. competitiveness.

NTIA continues to lead the way in recognition of ATV's significance in communications policy, international trade, national security and the enhancement of U.S. industrial competitiveness. NTIA commissioned a study by Darby Associates, entitled Economic Potential of Advanced Television Products ("Darby Report", April 1988) which explored the market and public policy implications of the introduction of a range of products which incorporate ATV technologies. In March 1989, NTIA submitted a report to the House Subcommittee on Telecommunications and Finance, Advanced Television, Related Technologies, and the National Interest, which identified the strategic implications of ATV and related technologies.

NTIA's analysis of ATV technical issues began in 1989 with development and defense of positions to support U.S. objectives for delaying the adoption of a worldwide HDTV production standard while at the same time advancing the cause for deciding on a U.S. transmission standard at the earliest date possible. This activity is to be followed by 1990 efforts to conduct tests to determine performance measures for ATV video quality assessment and to develop and defend U.S. positions in standards-making bodies (CCIR, CCITT, ANSI). Moreover, evaluation, monitoring and assessment of FCC/Industry Advisory Committee findings and FCC regulatory policies will be required. The 1991 effort will be much more concentrated, addressing differing standards for alternative ATV delivery methods and leadership in video standards activities.

Performance Standards for Different ATV Delivery Systems - NTIA will undertake the policy, technical and economic analysis needed to assess the policy implications of employing different performance (quality) standards for different ATV transmission systems. Increasing bandwidth will be available for ATV delivery as one moves from over-the-air broadcast to cable to satellite to fiber transmission-based systems. This increased bandwidth may enable higher quality images to be transmitted by satellite and fiber delivery than by conventional broadcast and cable. It is necessary to determine the impact of varying performance standards in the ATV marketplace on the policy choices available to government decision-makers. The analysis will include alternative performance measures for different ATV transmission modes, defining evaluation criteria, and conducting trade-off studies which include performance testing. Results of this work will provide a rigorous technical basis for determining technology policy options for future U.S. ATV policy directions in domestic and international markets. NTIA will expand the work begun in previous years and initiate new efforts to:

- identify/characterize different performance alternatives for different modes of transmission;
    cable TV distribution facilities
    direct broadcast satellite
    UHF broadcast
    UHF/VHF simulcast
    fiber optics/broadband ISDN for multimedia applications (to include integrated voice, video and data)
    other, e.g., microwave broadcast;

- define evaluation criteria to include specifications of performance, spectrum usage/efficiency and cost factors;

- evaluate on-going policy developments at the FCC;

- conduct trade-off studies to include characterization of the advantages/disadvantages of alternative transmission modes and different performance criteria, and performance testing/evaluation of transmission modes under varying conditions; and

- analyze the findings of these efforts to formulate and develop policy options for government decision-makers.

	1991	1992	1993	1994	1995
Budget Authority	370	408	408	408	408
Outlays	296	382	405	408	408
FTEs	3	4	4	4	4

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Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Detail Obligations in thousands)

Activity: Domestic and International Policies
Subactivity: Domestic Policies
Program Change: Advanced Television Systems

Object Class		1991 Increase/ (Decrease)
11	Personnel compensation	
11.1	Full-time permanent	112
11.3	Other than full-time permanent	
11.5	Other personnel compensation	
11.9	Total personnel compensation	112
12.1	Civilian personnel Benefits 26.95%	30
21	Travel and transportation of persons	10
22	Transportation of things	1
23.1	Rental payments to GSA	18
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	22
24	Printing and reproduction	9
25	Other services	71
26	Supplies and materials	7
31	Equipment	90
99	Direct obligations	370

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Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM CHANGE PERSONNEL DETAIL
(Direct Obligations in thousands)

Activity: Domestic and International Policies
Subactivity: Domestic Policies
Program Change: Advanced Television Systems

Title:		Grade	Number	Annual Salary	Total Salaries
Communications Policy Specialist		14	1	50,342	50,342
Electronics Engineer		13	1	42,601	42,601
Electronics Engineer		12	1	38,637	38,637
Clerk Typist		5	1	17,936	17,936
Total			4		149,516
Less lapse	25.00%		1		37,379
Total full-time permanent			3		112,137

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	
Total	3
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	
Total	4

04-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Direct Obligations in thousands)

Activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Spectrum management:											
Spectrum plans and policies	Pos/BA	19	$1,662	18	$1,638	18	$1,720	18	$1,720	0	$0
	FTE/Obl.	(13)	(1,773)	(19)	(1,698)	(19)	(1,720)	(19)	(1,720)		
Spectrum management analysis and operations	Pos/BA	100	6,294	102	6,438	102	6,753	102	6,753	0	0
	FTE/Obl.	(99)	(6,310)	(105)	(6,438)	(105)	(6,753)	(105)	(6,753)		
Total	Pos/BA	119	$7,956	120	$8,076	120	$8,473	120	$8,473	0	$0
	FTE/Obl.	(112)	(8,083)	(124)	(8,136)	(124)	(8,473)	(124)	(8,473)		

04-Jan-90

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
Activity	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Spectrum management:										
Spectrum plans and policies.................	0	$0	0	$0	0	$0	0	$0	0	$0
Spectrum management, analysis and operations...............	0	255	0	0	0	0	0	0	0	0
Total.....................	0	$255	0	$0	0	$0	0	$0	0	$0

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Spectrum Management

Goals and Objectives

Goals:

- o Provide policy, management and direction to ensure the Federal Government will use the radio frequency spectrum effectively and efficiently during both peacetime and national emergencies. Specifically:
  - — Represent the U.S. in the international spectrum management fora.
  - — Establish policies for and manage the Government's use of the radio frequency spectrum so that this use is effective, efficient, equitable and responsive to national and international requirements.
  - — Develop, in conjunction with the FCC, plans for effective long-range management and sharing of the radio frequency spectrum resource.
  - — Identify and satisfy the national security emergency preparedness telecommunications and automated information processing systems security requirements for the U.S. Government.
  - — Ensure the efficient and effective use of telecommunications facilities and resources by the U.S. Government.

Objectives:
Spectrum Plans and Policies

- o Issue/revise allocations and regulations governing Federal spectrum use.
- o Develop emergency/wartime and long-range plans for use of the spectrum.
- o Coordinate and develop the Government's contribution to U.S. proposals and positions for international spectrum management fora.
- o Participate in bilateral and multilateral meetings on spectrum management issues with foreign administrations.
- o Analyze proposals relative to the spectrum management process.
- o Assist in the development of U.S. proposals and positions for, and participate in international radio conferences.
- o Implement the results of international radio conferences.
- o Initiate and conduct scientific and technical cooperation in the field of telecommunications and spectrum management with specific foreign countries in accordance with U.S. foreign and international trade policy.
- o Participate with other Federal agencies in communications emergency readiness and information protection planning and implementation.
- o Develop procedures, and incorporate them in the planning process for a timely and orderly transition from normal to emergency modes.
- o Formulate and advocate plans and policies necessary in the development of strategies to improve and restore U.S. telecommunications resources.

Spectrum Management, Analysis and Operations

- Review and process Federal applications for frequency assignments, to authorize the use of the spectrum and to maintain data base files and performance measurements necessary to support this activity.
- Improve Government spectrum management and use by:
  - Developing plans for intraservice and interservice sharing in selected bands;
  - Evaluating proposed Federal telecommunications systems for certification for spectrum support in accordance with OMB Circular A-11;
  - Resolving conflicting requirements concerning Federal agencies' use of the spectrum;
  - Planning and coordinating spectrum measurements in selected frequency bands which are conducted under the Telecommunication Sciences Research activity to support spectrum resource assessments, compatibility analyses, and compliance with standards and authorized spectrum usage;
  - Providing technical engineering support in preparation for and participation at international radio conferences.

Base Program

The national objectives for the use of the radio frequency spectrum are to ensure effective and efficient use of the spectrum in the best interest of the Nation, with care to conserve it for uses where other means of communication are not available or feasible.1/ The primary objectives in support of national policies and goals are: (1) to serve the national security and defense, (2) to safeguard life and property, (3) to support crime prevention and law enforcement, (4) to foster conservation of natural resources, (5) to stimulate social and economic progress, (6) to promote scientific research, development and exploration, (7) to enhance the conduct of foreign affairs, and (8) to provide for national and international dissemination of educational, general and public interest information and entertainment. To satisfy these objectives, the radio spectrum is managed by NTIA for the Federal Government (both nationally and internationally) and by the FCC for the non-Government sector. A high degree of cooperation and coordination is required since the majority of the allocated radio spectrum, approximately 86 percent, is shared between the Government and non-Government sectors. More pressure to conserve spectrum is envisioned as technological growth, the advent of satellites, the emergence of developing nations (industrially and politically), the need for more rapid communications, and the transfer of large volumes of information, increase the demands for spectrum use. Of paramount concern over the next ten years are the World Administrative Radio Conferences at which nations can implement changes to the international rules, regulations and procedures governing the radio spectrum and its management. It is absolutely essential for the U.S. to ensure its national objectives and requirements are met at these conferences.

1/ Table reflecting typical use of radio frequency bands is on page NTIA-35.

The Spectrum Management activity is responsible for managing the Federal use of the radio spectrum by: (1) establishing and issuing policy guidance through allocations and regulations governing the Federal spectrum use; (2) developing plans for the peacetime and wartime use of the spectrum; (3) preparing for, participating in, and implementing the results of international radio conferences; (4) assigning frequencies; (5) maintaining spectrum use data bases; (6) reviewing Federal agencies' new telecommunication systems requiring spectrum use and certifying that spectrum will be available for such use; and (7) providing the technical engineering expertise, performing the necessary spectrum resource assessments and providing the automated computer capability to carry out the above; (8) developing plans for and participating in Federal Government emergency communications readiness activities, and (9) participating in Federal Government telecommunications and automated information systems security activities. To perform these responsibilities, the Spectrum Management activity is divided into two subactivities: "Spectrum Plans and Policies" and "Spectrum Management, Analysis and Operations."

Spectrum Plans and Policies

This subactivity centers on the establishment of plans and policies to help ensure the efficient, effective, and equitable use of the spectrum. It includes four major components: Federal policy formulation, long range planning, international forum preparation/execution and telecommunications survivability/protection.

As part of its role in establishing Federal spectrum management policy, NTIA allocates and assigns the radio frequency spectrum to Federal users for specific purposes. This responsibility includes chairing the Interdepartment Radio Advisory Committee (IRAC), its major subcommittees and various specialized ad hoc groups. The IRAC, which is a group composed of the representatives of 20 Federal agencies and an FCC liaison, is the primary Executive Branch advisor to NTIA on Federal agency spectrum management. Through the Spectrum Planning, Technical and Frequency Assignment subcommittees as well as several ad hoc groups, the IRAC advises NTIA on spectrum policy and procedural matters and provides recommendations for conflict resolution.

With respect to national spectrum concerns, NTIA, in conjunction with the FCC, formulates long-range spectrum allocation plans that respond to the changing requirements of both Government and non-Government services. Spectrum planning is also conducted relative to wartime and emergency conditions.

In its international spectrum management role, NTIA cooperates with the FCC and the State Department in preparing for diverse international negotiations and forums on spectrum allocations and use regulation. Specifically, NTIA coordinates and develops the Government's contributions to the U.S. proposals for these forums and helps prepare the preliminary and final national positions. NTIA also analyses the known intentions of other nations to determine whether U.S. counter-proposals are necessary. In addition, NTIA works towards building confidence worldwide in U.S. spectrum planning techniques to win support for U.S. positions and participates in the negotiations and forums themselves.

NTIA plays a central role in developing and promoting policy and guidance to improve the Government's emergency communications response posture and the protection of information during electronic transmission or processing.

Throughout FY 1990 and FY 1991, NTIA will continue to: direct and support the IRAC and its representative subcommittes, both administratively and technically; resolve spectrum management problems among the Federal agencies and other domestic and foreign entities; negotiate with technical personnel in foreign administrations in support of U.S. aims and goals at international conferences; develop and modify spectrum policies and procedures for crisis-related situations; conduct long-range spectrum planning in coordination with the FCC; prepare for and participate in the ITU International Radio Consultative Committee (CCIR) Study Groups' activities; provide emergency readiness planning for the Federal use of the radio frequency spectrum; chair and direct the activities of the Frequency Management Advisory Council (FMAC); continue spectrum management training activities including support for the U.S. Telecommunications Training Institute (USTTI); formulate policies, issue and revise allocations and regulations concerning Federal spectrum use; identify and provide solutions to issues and deficiencies in the emergency communications planning process in support of the National Communications System (NCS); and continue planning and participation activities associated with the China Protocol.

In addition, the following specific conference and meeting activities will be performed:

Conference/Meeting	FY 90			FY 91		
	Prepare For	Participate In	Implement the Results of	Prepare For	Participate In	Implement the Results of
(1) CCIR Joint International Working Party (JIWP) 10/11-1 (Sound Broadcast & Broadcast Satellite Service)	X	X		X	X	
(2) CCIR JIWP 4/1 (Effective Use of the Orbit)	X	X		X	X	
(3) CCIR JIWP 8/10-1 (Broadcast & Aeronaut Svs)	X	X		X	X	
(4) ITU Administrative Council	X		X	X		X
(5) Space WARC (2nd Session)			X			X
(6) Plenipotentiary			X			
(7) CCIR Study Groups 2,3,4,5,6,7,& 9				X		
(8) CCIR IWP 5/2	X	X		X	X	
(9) CCIR IWP 1/2	X	X		X	X	
(10) CCIR Study Groups 1,8,10,11, Joint Study Group for Television & Sound Transmissions (CMTT), and Joint Study Group for Vocabulary & Related Subjects (CMV)	X	X		X		
(11) CCIR Plenary	X		X			
(12) IWP 1/4	X	X		X	Y	
(13) WARC (92)	X			X		
(14) NATO/ARFA	X	X		X	X	
(15) CCIR IWP 9/14	X	X		X	X	
(16) IWP's and JIWP's for WARC 92 Preparation	X	X		X	X	
(17) IWP for WARC 93 Preparation	X	X		X	X	
(18) JIWP on Improved use of the Frequency Spectrum	X	X		X	X	
(19) High Level Committee to Review Structure and Functioning of ITU	X			X		

Spectrum Management, Analysis and Operations

This subactivity has three components which are discussed below.

(1) Spectrum Management

NTIA reviews, processes, and authorizes Federal radio frequency assignments. Each year the agency receives a number of requests for such assignments and processes approximately 86,000 weighted frequency assignment actions. NTIA also makes on-site inspections of facilities to determine the degree of compliance with authorized use and will continue its reviews of Federal frequency assignments to evaluate the validity of current needs. This frequency assignment responsibility involves chairing the IRAC Frequency Assignment Subcommittee (FAS) as well as directing that Subcommittee's activities and providing its administrative support. The assignment responsibility also involves ensuring that the spectrum needs of the United Nations and foreign embassies are met. NTIA maintains and updates files and records, either hard-copy or computerized, necessary for radio spectrum management. The computerized files include: the Government Master File of Frequency Assignments (GMF); portions of the FCC frequency records necessary for use in Federal spectrum management, especially the management of shared Government/non-Government frequency bands; frequency allocation records; terrain elevation data; and Federal systems review data. These diverse files and records are available to provide varied information and publications for NTIA's staff as well as the rest of the spectrum management community. Some of these data relate to border frequency coordination with Canada and Mexico. A microfiche record of the total GMF and a Directory of Field Contacts is also available. In addition, 6,700 requests for specialized retrieval from these varied files are expected in support of the activities in spectrum management. The information provided will be used by Federal agencies in proposing frequency assignments and by NTIA personnel in analyzing potential interference problems. Also within the spectrum management activity, the NTIA Manual of Regulations and Procedures governing the Federal Spectrum will be updated and administrative support will be provided to the IRAC, the Spectrum Planning Subcommittee (SPS), the Technical Subcommittee and the IRAC ad hoc groups.

(2) Spectrum Analysis

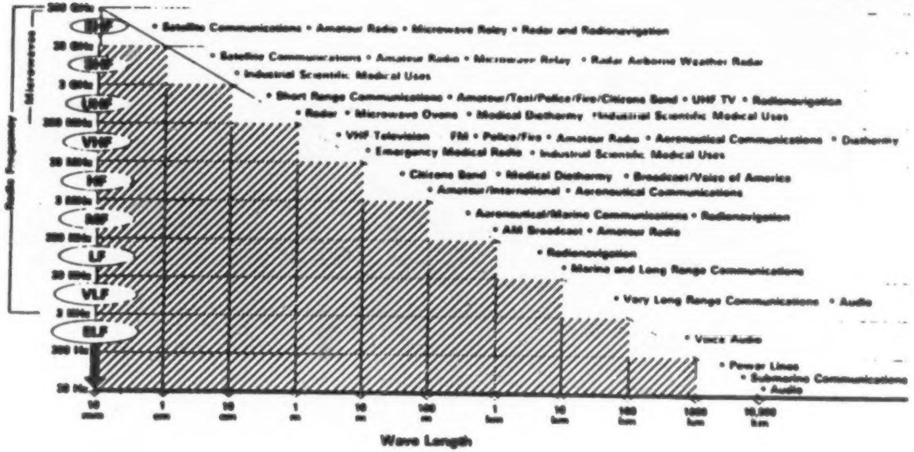
NTIA conducts Spectrum Resource Assessments (SRAs), system reviews, and space system reviews; assists Federal agencies in resolving operational problems; and provides technical engineering/policy analysis support for international conferences. The SRA studies evaluate the effect of existing and planned Government telecommunication systems on the radio frequency spectrum. Approximately eleven percent of the spectrum used by the Government will be studied. These technical/policy analyses will be of two types, the first focusing on selected portions of the radio frequency spectrum and the second focusing on particular types of uses of the spectrum. Both types of studies will examine present and planned equipment usage to determine if the spectrum is efficiently and effectively used, the potential for compatible sharing between Federal services, and the effects of proposed and planned national and international allocation changes on the ability of Federal agencies to complete their mandated missions. NTIA will also investigate the possibility of increased sharing of spectrum resources between Federal and nonfederal telecommunication systems in order to increase the efficient use of the spectrum within the U.S. Results from the Institute for Telecommunication Sciences' Radio Spectrum Measurement System and laboratory will aid in the evaluation of frequency utilization and compliance. In addition, the tests will provide measurement data to support the SRAs. NTIA will also evaluate data regarding use of frequencies by Federal radio stations to assess the extent and nature of the agencies' use of assignments. NTIA will continue its system reviews of proposed Federal telecommunications systems for compliance with Federal regulations and for compatibility with other present and planned systems, its space system reviews of proposed Federal space systems for coordination requirements with foreign countries, and proposed foreign space systems for assessment of compatibility with Federal telecommunication systems. After completion of a preliminary system review, NTIA, with the advice of the Spectrum Planning Subcommittee of the IRAC (interagency advisory group), provides or denies certification of spectrum support for the system or indicates what changes are required in the system before certification can be provided. System reviews are done at the conceptual, experimental, developmental and preproduction stages of a given system's procurement cycle, as required by OMB Circular A-11.

NTIA will resolve operational conflicts that arise between Federal agencies regarding the use of the spectrum and coordinate the process of meeting Federal spectrum requirements that cannot be satisfied within existing policies and procedures. These operational problems are detected through band studies or brought to the attention of NTIA by other Federal agencies. Solving such problems demands analyses of the effects that proposed changes in frequency assignments, operational procedures, or equipment will have on the electromagnetic environment as well as consideration of the various trade-offs between technical and operational factors. NTIA will provide solutions to operational problems involving incompatibility between Federal agency operations. In support of international spectrum management, NTIA will continue to provide engineering analyses on technical issues necessary to support U.S. participation in and preparation for international conferences and meetings.

(3) Spectrum Operations
NTIA will continue to provide computer facilities and associated software for the data base files supporting spectrum management. Support to spectrum management also includes the update and development of new software to enhance the timeliness and efficiency of the frequency assignment process. To conduct the various reviews and analyses, NTIA continuously assesses its analytical capability to ensure methods of problem solving appropriate to new communication systems and state-of-the-art changes in telecommunications technology. NTIA develops and maintains analytical computer programs that will permit rapid computation of interference effects between existing and proposed systems. A number of these computer programs must be tailored to fit requirements of specific problems.

In FY 1990 and FY 1991, NTIA will: (1) process and authorize frequency assignment actions to ensure interference-free operations of Federal stations; (2) maintain and update spectrum management data bases, and issue changes to regulations/allocations; (3) assess the present and projected Federal use of the spectrum by conducting SRAs (concentrating on bands and services supporting upcoming international conferences and those where significant improvements in utilization appear possible); (4) resolve operational problems concerning interagency conflicts in the use of the radio frequency spectrum that cannot be satisfied within existing policies and procedures by evaluating trade-offs between technical and operational factors; (5) evaluate proposed Federal systems to determine compatibility with present and other proposed systems, adherence to regulations and availability analysis (resulting in approval with changes in the frequency band, operational procedures or system design, or disapproval); (6) provide technical support to the IRAC, and its subcommittees associated with the preparation and participation in international conferences and CCIR study groups; (7) maintain and update existing computer software used for processing assignments, data bases, and interference calculations; and (8) design or implement new software packages to further improve assignment data processing and analytical engineering evaluation.

Typical Uses of Radiofrequency Bands



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Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS
(Direct Obligations in thousands)

Activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Telecommunication sciences research:											
Spectrum research and analysis	Pos/BA	18	$1,798	19	$1,772	19	$2,019	19	$2,019	0	$0
	FTE/Obl.	(23)	(1,635)	(20)	(1,772)	(22)	(2,019)	(22)	(2,019)		
Systems and networks research and analysis	Pos/BA	12	1,460	18	1,681	18	1,773	18	1,773	0	0
	FTE/Obl.	(19)	(1,513)	(17)	(1,705)	(18)	(1,773)	(18)	(1,773)		
Total	Pos/BA	30	$3,258	37	$3,453	37	$3,792	37	$3,792	0	$0
	FTE/Obl.	(42)	(3,148)	(37)	(3,477)	(40)	(3,792)	(40)	(3,792)		

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Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease)	
Activity	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Telecommunication sciences research:										
Spectrum research and analysis.............	28	$3,102	24	$3,000	24	$3,000	24	$3,000	0	$0
Systems and networks research and analysis.............	39	3,776	56	3,800	56	3,800	56	3,800	0	0
Total.....................	67	$6,878	80	$6,800	80	$6,800	80	$6,800	0	$0

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses

Justification of Program and Performance

Activity: Telecommunication Sciences Research

Goals and Objectives

Goals:

- Maintain the U.S. leadership position in state-of-the-art telecommunications research.
- Contribute to and reinforce NTIA policy and spectrum programs by providing a strong scientific and technical research base in telecommunications.
- Provide U.S. leadership and technical contributions in the development of domestic and international telecommunications standards to help remove barriers to the manufacture and export of telecommunications equipment and services.
- Serve as a central Federal repository for radio propagation data and performance model predictions which are used nationally and internationally.
- Contribute to the efficient use of Government resources by providing research, evaluation, and advice/support to other Federal agencies as requested in telecommunications areas where they lack expertise and/or do not need it permanently.

Objectives:

- Develop analytical techniques to assist in the Federal Government frequency assignment process.
- Provide Government and industry telecommunication users and planners with analysis methodology, engineering models, design techniques, and data concerning radio spectrum and propagation characteristics.
- Provide technical support for U.S. participation in international spectrum and geostationary orbit allocation conferences.
- Lead and support the development of national and international standards impacting U.S. competitiveness and trade in T&I equipment and services.
- Develop, implement and promulgate user-oriented performance measures to facilitate the competitive provision and efficient use of integrated voice, data, and video communication products.
- Assist in the effective introduction of new telecommunication technology by other agencies in support of national goals.
- Maintain the capabilities of NTIA to serve in support of the Secretary's mission to assist other Federal agencies in telecommunication matters.
- Increase NTIA's competence and skill in telecommunication sciences and engineering as a basis for improved policy analysis.
- Assist in achieving maximum efficiency of Government operational telecommunications systems.

Base Program

Through the Telecommunication Sciences Research program, NTIA performs state-of-the-art telecommunication research and engineering to further applied knowledge of the radio frequency spectrum and to improve telecommunications system planning, design and evaluation. This knowledge base is essential to support NTIA's policy development, spectrum management responsibilities, and technical support to other Federal agencies. These research and engineering efforts are directed toward improving the U.S. telecommunications technology base and providing a technical foundation for Administration telecommunications policy development in national and international arenas.

As a result of these activities, NTIA has established a core telecommunications research expertise which is accessed by both public and private sector interests. Through reimbursable agreements with other Federal agencies, NTIA applies its expertise to practical problems in telecommunications today. For example, both other government agencies and the private sector have access to NTIA's advanced propagation models through two methods: 1) purchase of select models through the National Technical Information Service, or 2) direct access, at cost, to an automated service which provides the opportunity to apply the latest models to a specific problem. The combination of direct-funded NTIA efforts and other agency-sponsored work operates in a synergistic manner, leading to greater contributions to and reinforcement of NTIA's telecommunication policy oversight and spectrum management roles.

These efforts are accomplished through two major programs. The first is Spectrum Research and Analysis, which includes research directed toward improving the understanding of radio-wave transmission to enhance spectrum utilization and the performance of radio communication systems. Important results of this research are spectrum use concepts and models that lead to more efficient industry and Government use of the radio frequency spectrum, and electromagnetic wave and propagation models that lead to improvement in radio system performance.

The second program is Systems and Networks Research and Analysis, which includes studies directed toward developing domestic and international telecommunications standards, assessing the performance of industry and Government telecommunication networks, and evaluating new technologies for application to future needs. These activities facilitate competition in the U.S. telecommunications industry, promote international trade opportunities for U.S. telecommunication firms, and improve the cost effectiveness of Government telecommunications use.

Through both of these programs, NTIA provides significant contributions to the activities of the International Telecommunication Union (ITU) and especially its major subdivisions; the International Consultative Committees on Radio (CCIR) and Telegraph and Telephone (CCITT) and the International Frequency Registration Board (IFRB).

Spectrum Research and Analysis

As part of NTIA's mandate to oversee the usage of the radio frequency spectrum by Federal agencies, NTIA maintains a mobile capability to monitor and measure the actual use of the spectrum. Utilizing the Radio Spectrum Measurement System (RSMS), which is a van equipped with instrumentation that can monitor signals between 10 kHz and 20 GHz, NTIA performs measurements in the land mobile and radar bands at selected sites, and makes other specialized measurements as necessary to ensure compliance with frequency assignment rules and regulations. NTIA's efforts are directed toward the measurement of spectrum usage in these selected bands and summarizing the results in support of specific IRAC concerns. The RSMS is also available for other agency applications on a reimbursable basis. In FY 1990 and 1991, measurements will be undertaken on behalf of the U.S. Air Force and NSA to assess spectrum occupancy use and radio interference concerns. ITS will also be assisting various DOD agencies to efficiently operate their own radio monitoring programs through technical consultations, and modification, design and construction of new radio monitoring systems. This work is based heavily on expertise developed for the RSMS, but it also provides an important means of investigating the use of advanced measurement hardware and software for the RSMS itself. As the requirements for measurements evolve, NTIA must continue to develop improved software and measurement techniques to support these increasingly sophisticated technical activities.

Spectrum Resource Assessments are performed as required in order to assess current and future Federal use of the spectrum and determine where significant improvements in utilization appear possible. In FY 1991, as in FY 1990, these activities will continue to further support essential spectrum utilization analyses ongoing at NTIA. Technical support will be continued on major frequency management concerns through representation at technical subcommittee (IRAC) meetings with principal emphasis being placed on improving Federal spectrum use and reallocating portions of that spectrum to the private sector.

The Second Session of the High Frequency (HF) Broadcasting Conference [HFBC (87)] was held during February-March 1987. United States objectives for HFBC (87) were to emerge from the Conference with U.S. broadcasting objectives satisfied and with the flexibility to respond to jamming to make the necessary adjustments to accommodate additional requirements. These objectives were achieved, at least temporarily. The ITU Plenipotentiary Conference has decided on two events which will impact U.S. broadcasting interests. The first is to hold a limited-reallocation WARC in early 1992 to determine if more spectrum will be allocated for exclusive use of the HF broadcasting services. The second event will be to hold another HF Broadcast Conference in 1993 to review and implement an "improved planning system" if it proves acceptable to all Administrations. Therefore, in FYs 90 and 91 follow-on efforts will be undertaken to examine, implement, and test the specific decisions adopted during the HFBC (87), and assess their impacts on U.S. HF broadcasting requirements to support U.S. broadcasting objectives as U.S. broadcasters prepare for the above WARC's. This includes the continued upgrading of the High Frequency Spectrum Utilization Model (HFSUM) capability for planning HF broadcasting. To the extent possible, the requirements of the U.S. organizations involved in international broadcasting (VOA, BIB, FCC) will be reviewed and coordinated to assure compatibility with planning approaches and national objectives. Limited analyses using HFSUM will be conducted to evaluate the expected performance of U.S. broadcasting requirements and objectives. Work will also continue, to the extent possible or necessary, on monitoring HF jamming transmitters to document their presence and approximate geographic locations.

NTIA also continues to provide support to various government agencies in technical areas pertaining to HF propagation system performance. Predictions of ionospheric characteristics and techniques may be used to anticipate the performance of HF communication circuits. The Voice of America funds NTIA efforts to provide these predictions which are used in frequency planning and coordination. The Ionospheric Communications Analysis and Prediction (IONCAP) program is an integrated system of models, developed by NTIA, which are designed to predict high-frequency sky-wave system performance and analyze ionospheric parameters. Various DOD agencies fund NTIA to make improvements to IONCAP and to develop methods to summarize the many calculations of systems performance from the IONCAP to help in the design of optimal antennas. Another aspect of NTIA's high frequency work directly supports the spectrum management role of ensuring that adequate spectrum resources will be available to those Federal users of the HF resource. The other agency work in this area complements the direct-funded efforts and facilitates the analysis and computer model development necessary to prepare for the next HFBC (scheduled for 1992/1993) which may have significant impacts on the availability of spectrum for U.S. HF users.

Scientific evaluation of the use of millimeter waves, which are located at the upper end of the allocated radio spectrum (30-300 GHz), is an ongoing research effort of NTIA. These frequencies can transmit vastly more information than is currently possible with the lower frequencies that are used in microwave relay systems. In addition, reallocating existing frequency users of lower bands to these higher frequency ranges will help ease the congestion experienced at the lower bands as well as provide for additional frequency availability. Two major objectives are currently served by the program to promote the orderly and effective commercial development of millimeter wave telecommunication applications. One objective is to develop models supported by measurements that enable the accurate prediction of communication link availability as limited by propagation. These models serve as a basis for system planning and design as well as spectrum regulation. To this end, NTIA's studies are directed towards a better understanding of the behavior of millimeter waves under various meteorological and topographical conditions. A second objective is to demonstrate the viability of millimeter wave systems. These demonstrations are meant to elucidate, in a convincing manner, the possible effective uses of millimeter waves for telecommunications and so accelerate commercial development. So far, NTIA's efforts have focused on laboratory and field measurements in the 10 to 200 GHz range. The efforts are currently directed towards satellite applications because of their relatively high commercial importance. In FY 1990, NTIA will build a receiver for the European Satellite Olympus, with beacons in the 20 and 30 GHz bands. This receiver will be deployed in the field in FY 1991. The results from these tests will be used to improve the current prediction models and will allow us to analyze various mitigating techniques to improve system reliability.

Under other agency agreements, NTIA's millimeter wave program provides information to a variety of users for purposes including governmental regulation of the radio spectrum, development of defense systems, and design of telecommunication systems. A variety of Department of Defense (DoD) sponsors have funded projects geared toward their particular application of millimeter-wave technology. The Extremely High Frequency (EHF) Telecommunication System Engineering Model (ESTEM) was developed by NTIA and adapted for the Army in order to predict the performance of a millimeter-wave system. NTIA is currently funding projects to perform studies and experiments necessary to develop user-oriented millimeter-wave propagation models applicable to frequencies up to 300 GHz that are useful in assessing millimeter-wave telecommunication system performance for all users of the technology. The broader thrust of the NTIA effort serves as an underpinning for the more focused work performed for specific Federal agencies in accommodating their particular system needs.

The demand for new and expanding telecommunication systems such as the High Definition Television (HDTV), cellular mobile telephone, and radio navigation systems has placed increased burdens on spectrum planners and policy makers. To address this situation NTIA develops fundamental data and more accurate modeling of rapid propagation that will lead to improved methods of planning spectrum sharing among the various users. Many systems of today, and especially those in the near future, are transmitting signals using wide frequency bandwidths that are necessary for the large amounts of information being sent. Many of the new systems are using digital modulation. Predicting how these systems can share the same spectrum space requires a better understanding of broadband radio propagation and the use of multi-dimensional modeling techniques. In FY 1989, NTIA began preliminary work centered on investigating the transmission channel characteristics of two widely spaced TV channels that may be used by HDTV. In FY 1990, NTIA is following up this work using data already taken from propagation tests performed by the Advanced Television Test Center (ATTC). These data contain a large amount of propagation information on potential ATV frequencies measured in the Washington, D.C. area. It is anticipated that our analysis of this data will provide important contributions to the ATV issue. The propagation models developed from these measurements are needed to identify the nature and degree of the propagation defects which may limit the use of VHF/UHF broadcasting for ATV, particularly if expansion channels are used. In addition, in FY 90 and 91 NTIA will examine competitive technological approaches for the development and provision of wideband services. This includes additional tests (e.g., signal protection analysis, bandwidth compression techniques) needed to assess the overall performance of ATV to yield video reception of sufficient quality to effectively compete in the marketplace.

NTIA will also evaluate spectrum management techniques as part of its initiative on the use and management of the radio frequency spectrum. These may include analyses of the role of new technology in efficient spectrum management, including interference avoidance, the effect of more flexible technical rules on spectrum use policies, or newly-developed alternatives to spectrum use.

DoD has long been the primary source of advanced technology. Currently, and through 1991 the largest part of the other agency sponsorship of NTIA will come from the needs of DoD. NTIA maintains a significant portion of its other agency work in support of civilian Federal agencies, such as the Department of Transportation, NASA, and the United States Information Agency where there is also a clear need for Government expertise in high technology areas. Primary emphasis will be given to responding to the highest priority other agency responsibilities which support national goals in defense, public safety and related mission responsibilities.

Examples of specific other agency projects NTIA has undertaken within Spectrum Research and Analysis include:

- o Continue to develop extensive HF/VHF prediction models for use by various DoD commands concerned with communication networks and radar services.
- o Provide measurements of the total radio signal environment at selected critical DoD test sites, using the RSMS for greatly improved measurement efficiency.
- o Provide tested propagation models and data based on time-shared computer systems, allowing rapid and widespread user access to improved telecommunication planning and prediction processes.
- o Provide consultation, design, and construction of specialized spectrum monitoring equipment for various DOD agencies, assisting them in meeting their operational missions.

Systems and Networks Research and Analysis

In its international standards activity, NTIA is working to expand trade opportunities for U.S. T&I providers by coordinating, leading and supporting U.S. participation in key technical negotiations of the CCITT and the CCIR. NTIA's standards activities under Systems and Networks Research and Analysis are focused on technical aspects of international standards development. They complement NTIA's efforts in the international policy area.

In FY 1989, NTIA continued leadership of U.S. CCITT Study Group B on Integrated Services Digital Networks (ISDNs) at the request of the Department of State; coordinated the approval of five new Recommendations on packet-switched network performance and two new Recommendations on ISDN performance at the CCITT Plenary Assembly; and assumed a leadership responsibility for ISDN performance standards development within CCITT Study Group XVIII. ISDN is a rapidly-evolving digital network technology which will ultimately provide integrated data, voice, and video communication services to subscribers on a worldwide basis; packet-switching technology is intrinsic to the provision of enhanced information services and may be the key to efficient service integration in future broadband ISDNs. In FY 1990 and FY 1991, NTIA will promote U.S. competition and trade objectives by continuing its leadership of U.S. CCITT Study Group B and Study Group XVIII, and will spearhead a major new CCITT work program aimed at developing comprehensive performance standards for ISDNs. During this timeframe, NTIA will place particular emphasis on broadband networks and the communication of high-definition video signals in its international standards leadership activities. NTIA will continue its effort to broaden and strengthen U.S. industry participation in international standards development through seminars and workshops, conference presentations, technical publications, and the provision of standards information services.

NTIA's international standards activities are complemented by active involvement in the development of U.S. standards for ISDNs and advanced packet-switching networks within the ANSI-accredited T1 (Telecommunications) Standards Committee. In FY 1989, NTIA continued leadership of the T1S1 Subcommittee, which is responsible for the development of U.S. standards for switching and signaling in emerging narrowband and future broadband ISDNs; and continued its leadership of Working Group T1Q1.3, which is responsible for developing performance standards for U.S. digital networks including ISDNs. In FY 1990, NTIA will develop formal contributions to national and international standards committees proposing technical solutions to some of the most compelling issues facing U.S. telecommunications planners, including the interoperation of multi-vendor systems (cable, microwave, fiber, satellite) in a competitive environment and the key ISDN problem of economical resource sharing among integrated services. NTIA's results will promote competition and innovation in the provision of integrated broadband digital services and will facilitate efficient matching of such services with user needs. NTIA will continue to lead and coordinate standards development in these key U.S. telecommunications industry forums in FY 1990 and FY 1991, and will work to ensure that emerging U.S. ISDN and packet-switched network standards are consistent with a competitive market environment and with FCC policy guidelines for Comparably Efficient Interconnection (CEI) and Open Network Architecture (ONA). The technical standards developed in these T1 forums during the next few years will influence network planning and procurement decisions spanning the 1990's and involve hundreds of billions of dollars in capital investment.

NTIA's international and U.S. standards committee leadership is supported by telecommunications research and engineering activities directed towards the development, implementation, and promulgation of user-oriented performance measures for integrated data, voice, and video communications equipment and services. During FY 1989, NTIA began the development of a prototype ISDN performance measurement laboratory implementing NTIA-developed national and international telecommunication performance standards, continued research aimed at developing user-oriented, technology-independent performance parameters and measurement methods for digital voice communication services, and initiated new research aimed at developing similar user-oriented performance measures for video communication services. During FY 1990 and FY 1991, NTIA will extend this new research to encompass digital video communication services supporting such future applications as video telephony and teleconferencing, computer-aided design and manufacturing, and High Definition Television. A specific goal will be to define technology-independent performance measures to facilitate a comparative evaluation of fiber optic, coaxial cable, and satellite transmission media in communicating high-definition video signals. These efforts are being furthered by various other agency projects. As an example, the Navy has tasked NTIA to provide system design and performance assessment support for a high data rate satellite telecommunications system optimized for computer aided design, computer assisted logistics, and video teleconferencing applications. In FY 1991, ITS will further expand its video communication performance studies through cooperative programs with private industry organizations.

NTIA is also involved in the development of Federal and domestic standards with other agency funding, including technical aspects of Federal standards, interoperability analyses, and technical and economic impact assessments. Often concepts advocated by NTIA in the domestic and international standards arena serve equally well in the Federal standards area. Thus, there is much synergy between the two activities as NTIA works to promote the overriding goals of open competition and unrestricted technology advancement.

During FY 1989, NTIA began a major new research effort aimed at determining the role of advanced satellite systems in future broadband ISDNs. Initial studies examined ISDN technologies and service requirements, identified relevant advanced satellite system capabilities, and outlined alternative architectures for integration of satellite-based transmission and switching systems with ultra-high speed terrestrial networks. FY 1990 and FY 1991 studies will examine the role of satellites in network management and restoral and will identify interface and functional standards required to successfully integrate satellite and terrestrial broadband transmission and switching facilities. Results will be disseminated in technical reports, open literature publications, and contributions to national and international standards committees including both CCITT and CCIR. Benefits will include enhanced efficiency and survivability in national and international broadband telecommunication services and continued strength in the U.S. satellite communications industry.

In a related program, NTIA will continue its work in developing prototype test equipment and methodology for measuring advanced satellite system performance using NTIA-developed national and international telecommunication performance standards. These activities, in part, support NTIA's responsibilities in the NASA-sponsored Advanced Communications Technology Satellite (ACTS) initiative. The ACTS, which is scheduled to be launched in 1992, will implement and optimize high-risk technologies that offer substantial improvements in spectrum and orbit efficiency and will facilitate new broadband satellite applications. Successful implementation of ACTS capabilities is essential to maintaining U.S. leadership and international trade opportunities in satellite equipment and services.

NTIA will evaluate scientific and technical developments in systems and networks in its study of the domestic telecommunications infrastructure. This will include examination of new technologies, such as fiber optic cable, electronic switching, and cellular telephony, and the effect of these technical developments on policy issues.

Examples of specific other agency projects NTIA has undertaken within Systems and Networks Research and Analysis include:

- Provide a network requirement analysis on the European Defense Communication System for DoD-Defense Communications System.
- Continue measurements of digital radio performance on a line-of-sight multipath fading channel for the Communications Systems Agency (CSA) and Communications Electronics Engineering Installation Agency (CEEIA).
- Continue engineering support to Defense agencies on the DSN and conduct studies of Local Area Networks.
- Develop digital transmission performance standards for the Defense Communications Agency.
- Continue development of concepts and analysis to provide cost-effective upgrade and improved area access for the DoD Defense Switched Network (DSN).
- Continue to develop a transmission monitor and control subsystem for a DoD digital transmission system.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ (Decrease)
11 Personnel compensation			
11.1 Full-time permanent	8,372	8,484	112
11.3 Other than full-time permanent	301	301	0
11.5 Other personnel compensation	58	58	0
11.9 Total personnel compensation	8,731	8,843	112
12.1 Civilian personnel Benefits	1,653	1,683	30
21 Travel and transportation of persons	391	401	10
22 Transportation of things	7	8	1
23.1 Rental payments to GSA	1,315	1,333	18
23.3 Commun., util., misc. charges	746	768	22
24 Printing and reproduction	188	197	9
25 Other services	1,345	1,416	71
26 Supplies and materials	169	176	7
31 Equipment	337	427	90
99 Subtotal, Direct Obligations	14,882	15,252	370
Reimbursable Obligations	6,800	6,800	0
TOTAL OBLIGATIONS	21,682	22,052	370
Personnel Data			
Direct:			
Total number of full-time permanent positions	180	184	4
Total compensable workyears:			
Full-time equivalent employment	190	193	3
Full-time equivalent of overtime and holiday hours	5	5	0
Reimbursable:			
Total number of full-time permanent positions	72	72	0
Total compensable workyears: Full-time equivalent employment	80	80	0

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Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
DETAILED REQUIREMENTS BY OBJECT CLASS
(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent			
	Executive level	78	78	
	Senior executive service	910	910	
	General schedule	7,384	7,496	112
	Subtotal	8,372	8,484	112
11.3	Other than full-time permanent			
	General schedule	301	301	
	Subtotal	301	301	0
11.5	Other personnel compensation			
	Overtime	34	34	
	Cash awards	24	24	
	Subtotal	58	58	0
11.9	Total personnel compensation	8,731	8,843	112
12.1	Civilian personnel benefits			
	Civil service retirement	199	199	
	Federal employees' retirement	526	541	15
	Thrift savings plan	131	134	3
	Federal insurance contribution act	289	297	8
	Health insurance	468	472	4
	Life insurance	34	34	
	Employees' compensation fund	6	6	
	Other	0	0	

	Subtotal	1,653	1,683	30
21	Travel and transportation of persons			
	Common carrier	201	204	3
	Per diem/actual	183	189	6
	Other	7	8	1
	Subtotal	391	401	10
22	Transportation of things	7	8	1
23.1	Rental payments to GSA	1,315	1,333	18
23.3	Communications, utilities and miscellaneous charges			
	Rental of ADP equipment	446	448	2
	Rental of office copying equipment	73	77	4
	Other equipment rental	23	23	
	Federal telecommunications system	117	122	5
	Other telecommunications services	68	75	7
	Postal Service by USPS	19	23	4
	Other	0	0	
	Subtotal	746	768	22
24	Printing and reproduction			
	[Payments to WCF]	174	183	9
	Boulder printing	14	14	
	Subtotal	188	197	9
25	Other services			
	Training:			
	Office of personnel management	8	9	1
	Other	10	14	4
	Other federal agencies:			
	National Oceanic and Atmospheric Admin. - Cross Services	155	155	
	National Institute of Standards and Tech. - Cross Services	261	261	
	National Institute of Standards and Tech. - Acctg Services	147	150	3
	Other agencies	2	2	
	Maintenance of equipment	75	83	8
	GSA reimbursable services	45	45	
	Payments to WCF	472	480	8
	Transfer to GA	0	0	
	Other	170	217	47
	Subtotal	1,345	1,416	71
26	Supplies and materials			
	Office supplies	110	113	3
	ADP supplies	59	63	4
	Subtotal	169	176	7

31	Equipment			
	ADP equipment	113	119	6
	Equipment depreciation	124	124	
	Other	100	184	84
	Subtotal	337	427	90
99	Subtotal, Direct Obligations	14,882	15,252	370
	Reimbursable Obligations	6,800	6,800	0
	TOTAL OBLIGATIONS	21,682	22,052	370

Department of Commerce
National Telecommunications and Information Administration
CONSOLIDATED SCHEDULE OF AVERAGE GRADE AND SALARY

	1989 Actual	1990 Estimate	1991 Estimate
Average ES Salary	$76,900	$76,900	$76,900
Average GS Grade	0	0	0
Average GS Salary	$42,300	$43,800	$43,643

Department of Commerce
National Telecommunications and Information Administration
CONSOLIDATED CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	$ 59	$ 52	$ 52
Management and professional services	...	...	...
Special studies and analyses	20	15	15
Management and support services for research and development	...	...	...
Total	$ 79	$ 67	$ 67

Consulting services: NTIA utilizes consultants throughout its programs to provide scientific or technical expertise in specialized areas.

Examples of the type of work include:

Spectrum Policies - for telecommunications experts to participate in Frequency Management Advisory Council.

Public Telecommunications Facilities Grant Program - review and evaluate grant applications.

Special studies and analyses: Specific contracts vary from year to year.

Examples of the type of work include:

Domestic Policies - analyze the policy implications of Advanced Television technologies and to identify relevent policy options on ATV and their economic impact.

Foreign Policies - assess and report on the U.S. telecommunications industry's views of government regulation, policies and trade factors affecting future commercial prospects in Southeast Asia.

Mr. **Dwyer**. Here to testify in support of this budget request is the Assistant Secretary for Telecommunications and Information, Janice Obuchowski.

Since this is your first appearance before our Committee, we will insert your biography into the record at this point. You may proceed with your statement.

[The biographical sketch of Ms. Obuchowski follows:]

BIOGRAPHY OF JANICE OBUCHOWSKI

Janice Obuchowski serves as the Assistant Secretary for Communications and Information for the Department of Commerce and Administrator for the National Telecommunications and Information Administration (NTIA).

Prior to joining NTIA, Janice Obuchowski was the Executive Director, International Affairs for NYNEX. In this position she managed the NYNEX international government affairs and diplomatic program.

Janice Obuchowski was the Senior Advisor to Chairman Fowler, advising him on telecommunications policy and international communications issues before the Federal Communications Commission until February, 1987. Ms. Obuchowski coordinated all FCC international activities, including participation in ITU conferences and telecommunications trade and policy talks.

Ms. Obuchowski was Chief of the FCC's Common Carrier Bureau, International Policy Division from 1982 to 1983. Her responsibilities included division management and international telecommunications policy formulation. As the legal assistant to the Chief of the Common Carrier Bureau from 1981 to 1982, Ms. Obuchowski supervised press and Congressional contacts during AT&T's divestiture and FCC deregulation of the telephone industry.

From 1976 to 1980, Ms. Obuchowski was an associate at Bergson, Borkland, Margolis & Adler, a Washington antitrust litigation firm. She chaired the Legislation Committee of the American Bar Association's Litigation Section from 1978 to 1980. In 1974 and 1975, Ms. Obuchowski was employed as a summer associate at Donovan, Leisure, Newton & Irvine in New York, N.Y. and as an investigator at the District of Columbia Criminal Justice Clinic.

Ms. Obuchowski received her Ju~~ris Doctor~~ degree from the Georgetown University Law Center in 1976. She was a Member and Editor of the Georgetown Law Journal. She graduated from Wellesley College, receiving a B.A. in 1973, with honors, and was named a Wellesley Scholar. She also attended the University of Paris.

Ms. Obuchowski's professional activities include lecturing on international and domestic telecommunications. She chaired the OECD Subcommittee of the U.S. Council for International Business Telecommunications and Information Policy Committee. She is also an Adjunct Professor of International Telecommunications Law in the Masters Law Program at the Georgetown University Law Center. Her language background includes French, Russian, Polish and Italian training.

Ms. Obuchowski is married to Albert Halprin. They reside in McLean, Virginia.

Ms. **Obuchowski**. Mr. Chairman, I will submit a formal statement for the record, and I will now provide a more abbreviated version.

GENERAL STATEMENT

Mr. Chairman, thank you for this opportunity to discuss the 1991 budget request of the National Telecommunications and Information Administration. Mr. Chairman, in the past, NTIA has enjoyed a very positive, open relationship with the Congress. We intend to maintain and build on this responsive relationship.

Telecommunications is a vital part of the United States economy. Our net national wealth in the telephone industry is estimated at nearly $700 billion, and over $100 billion for broadcasting and cable properties. We expect the growth in this sector to continue. We also expect that the issues it raises will be complex and global in nature.

All of this calls for a very strong and competent American telecommunications policy. NTIA, with an essentially static budget over the last few years, has addressed the highest priority issues within the resources that we are allocated. I am committed to administer NTIA in such a way that we use its resources to the fullest.

I would now like to address the specifics of the budget. NTIA is requesting $15.3 million for its salaries and expenses appropriation. The $15.3 million for salaries and expenses represents a program increase of $370,000 over the 1991 base program. This increase will allow NTIA to continue its technical and policy efforts in advanced television systems research.

President Bush and Secretary Mosbacher recognize that the world is experiencing an accelerating globalization of its industries and markets. No industry is more subject or contributes as much to that trend as telecommunications and information. This perspective will guide NTIA's mission in the years ahead.

DOMESTIC ACTIVITIES

Throughout the budget year, NTIA will emphasize three major initiatives in telecommunications policy development. First, NTIA has begun a comprehensive study of the U.S. telecommunications infrastructure. Among other things, this study will examine the relationship between our telecommunications networks and economic development in both rural and urban areas, and the role of regulatory and other government policies in promoting the development of a telecommunications infrastructure that meets present and future needs.

Second, NTIA will study spectrum efficiency and use. This NTIA study will be the first comprehensive analysis of spectrum issues in two decades. While spectrum is an invisible resource, it nonetheless is an extraordinarily valuable one. Inefficient management of this resource can impede the development and introduction of new and innovative services.

Third, NTIA is examining the effects of globalization in markets for mass media services. Currently, firms such as Time-Warner, Fox Broadcasting, and Sony are harnessing a range of technologies to become major participants in the global information industry. We hope our analysis will provide the basis for formulation of U.S. policies in this critical area of the economy.

INTERNATIONAL ACTIVITIES

Turning to our international role, NTIA looks forward to cooperating with other agencies of Federal Government in the development and implementation of international telecommunications policies. Specifically in the area of standards development, NTIA's spectrum management personnel and engineers from our Institute for Telecommunication Sciences are world-recognized authorities who serve in leadership positions in a number of international organizations.

NTIA will also continue its activities in conjunction with other agencies in opening telecommunications markets in both developed and developing countries. We will contribute our technical and regulatory expertise in Eastern European countries where doors are opening and needs are great. We are particularly enthusiastic about the Joint Telecommunications Communique, which was signed in Warsaw during the Presidential mission to Poland by Secretary Mosbacher and Polish Communications Minister Marek Kucharski.

SPECTRUM MANAGEMENT

Turning to spectrum management, NTIA's Federal radio spectrum management activities account for a major part of our program activities. The Government relies upon radio communications to provide a broad range of public services, including air traffic control, weather monitoring, law enforcement, and national defense.

RESEARCH ACTIVITIES

Our final overall program area is NTIA's laboratory and principal research arm, the Institute for Telecommunication Sciences in Boulder, Colorado. This is the Government's central facility for scientific telecommunications research and engineering. This includes providing information necessary to understand the complex nature of radio wave behavior, including developing state-of-the-art radio wave propagation models; advising and assisting Government entities, applying telecom research and technology to best meet their needs; and developing telecommunications standards which ensure that Federal systems meet user requirements.

ADVANCED TELEVISION SYSTEMS

NTIA's budget for 1991 includes a program increase of $370,000 to permit NTIA to remain highly involved in removing obstacles to the development of advanced television systems technologies that are responsive to the needs of the U.S. marketplace.

To support advanced television development, the Institute for Telecommunication Sciences will be undertaking propagation measurements and channel assignment studies of the television band to assess ways in which broadcasters may supplement their signals with assigned television frequencies. ITS will also be developing technical criteria for assessing video quality, which are useful for comparing the relative merits of television technologies and systems. NTIA will study the economic and policy implications of standards proposals now before the FCC.

CONCLUSION

To conclude, Mr. Chairman, the size of the industry that NTIA oversees is enormous and growing rapidly. The efforts just described present some of the highlights of our activities. We urge the subcommittee to support NTIA's budget proposals for 1991, and we thank you again for this opportunity to discuss NTIA's plans with you.

I am prepared to respond to any questions that you may have.

[The prepared statement of Ms. Obuchowski follows:]

STATEMENT BY THE ASSISTANT SECRETARY
FOR COMMUNICATIONS AND INFORMATION
JANICE I. OBUCHOWSKI
BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON THE DEPARTMENT OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED SERVICES

Mr. Chairman and Members of the Committee:

Thank you for this opportunity to discuss the 1991 budget request of the National Telecommunications and Information Administration (NTIA). Mr. Chairman, in the past NTIA has enjoyed a very positive, open relationship with the Congress. We intend to maintain and build on this responsive relationship with this Congress, as together we strive to promote the competitiveness of the telecommunications sector and to ensure that the American public receives world class telecommunications and mass media services.

1991 BUDGET REQUEST

NTIA is requesting $15.3 million for its salaries and expenses appropriation and no funds for the Public Telecommunications Facilities Program (PTFP) appropriation. The $15.3 million for salaries and expenses represents a program increase of $370 thousand over the 1991 base program. This increase will allow NTIA to continue its technical and policy efforts in advanced television systems research.

NTIA'S MISSION

NTIA serves, through the Secretary of Commerce, as the President's principal adviser on telecommunications policies.

President Bush and Secretary Mosbacher recognize that the world is experiencing an accelerating globalization of its industries and markets. And no industry is more subject, or contributes as much, to that trend as telecommunications and information. We can no longer look at domestic and international policies for this industry in isolation; they are inextricable parts of a whole. This perspective will guide NTIA's mission in the years ahead. NTIA will examine the global implications that technological growth and worldwide economic trends have fostered, and choose those areas where we can make the best contributions in support of U.S. goals.

RESPONSIBILITIES

The budget request will support NTIA's primary responsibilities:

- Serving through Secretary Mosbacher as the principal Executive branch adviser to the President on telecommunications policy;
- Developing and presenting Executive branch policy on communications and information services;
- Setting policies for, and managing Federal Government use of, the frequency spectrum;
- Developing, with the FCC, the State Department, and other agencies, international communications policies for presentation at international conferences and meetings, and overseeing the activities of COMSAT as U.S. signatory to INTELSAT and INMARSAT;
- Providing leadership for telecommunications standards-setting,

particularly for Integrated Services Digital Networks (ISDN) standards; and

- o Providing technical support to other agencies and conducting telecommunications research, chiefly through our Institute for Telecommunication Sciences in Boulder, Colorado.

At this point, I would like to highlight a few of NTIA's activities, followed by a discussion of the program increase for Advanced Television Technologies.

TELECOMMUNICATIONS POLICY ACTIVITIES

Currently, and into the budget year, NTIA will emphasize three major initiatives in telecommunications policy development. First, NTIA has begun a comprehensive study of the U.S. telecommunications networks -- our telecommunications infrastructure. This nation's economic activities have become so dependent on telecommunications that we cannot allow outmoded policies to interfere with innovation in this sector. Among other things, this study will examine:

- -- the relationship between our telecommunications networks and economic development, in both rural and urban areas;
- -- the relationship between our national telecommunications networks and the competitiveness of U.S. business in a global marketplace;
- -- the importance of telecommunications in the delivery of such critical services as education, health care and public safety, and its overall impact on quality of life of American citizens;
- -- the current state of development of public switched and

private networks in the United States, and the prognosis for the future; and

-- the role of regulatory and other government policies in promoting the development of a telecommunications infrastructure that meets present and future needs.

Second, NTIA will study spectrum use and efficiency. This NTIA study will be the first comprehensive analysis of spectrum issues in two decades. While spectrum is an invisible resource, it nonetheless is an extraordinarily valuable resource. Inefficient management of this resource can impede the development and introduction of innovative services and, at worst, can threaten the ability of governmental agencies, including public safety agencies to adequately serve the public. We must find ways to ensure that the spectrum is being managed effectively and efficiently and the NTIA study should provide the basis for possible solutions.

Third, NTIA is examining the effects of globalization in markets for mass media services. Currently, firms such as Time-Warner, Fox Broadcasting, and Sony are harnessing a range of technologies -- from broadcast satellite to cable television to consumer electronics -- to become major participants in a global information industry. We are just beginning to understand the implications of competitive pressures internationally for our domestic mass media policies. This study will examine U.S. mass media policies in light of these international developments. We hope our analysis will provide the basis for formulation of U.S. policies in this critical part of our economy.

INTERNATIONAL CONFERENCES

NTIA looks forward to cooperating with the Department of State, the United States Trade Representative, and the Federal Communications Commission, as well as other agencies within the Department of Commerce, in the development and implementation of international telecommunications policies. This area demands effective action. NTIA has unique strengths to bring to this interagency partnership, and we expect to achieve a unified, cohesive approach for international conferences and standards setting forums.

Specifically, in the area of standards development, NTIA's spectrum management personnel and engineers from our Institute for Telecommunication Sciences are world-recognized authorities who serve in leadership positions in a number of international organizations. In the fiercely competitive world telecommunications market, adoption of standards is more than just a technical matter. Therefore, a high level of U.S. competence in standards development and implementation is increasingly important in the international arena.

NTIA will be preparing for a number of international conferences, especially the World Administrative Radio Conference on frequency allocations to be held in 1992. This conference will address many of the issues remaining from previous conferences affecting areas such as mobile services, high frequency broadcasting, high definition television (HDTV) and satellite broadcasting. NTIA will lead preparation of government views on these issues-while the FCC performs the corresponding task for the private sector. There will be close coordination between NTIA and the FCC during conference preparation.

NTIA will also continue its activities in conjunction with other agencies in opening telecommunications markets for U.S. firms in both developed and developing nations. We will explore new opportunities to contribute our technical and regulatory expertise in Eastern Europe countries such as Poland and Hungary where doors are opening and needs are great.

We at NTIA are particularly excited about the Joint Telecommunications Communique, which was recently signed in Warsaw by Secretary Mosbacher and Polish Minister Marek Kucharski. The Communique signifies the beginning of a cooperative working relationship between Poland and the United States in the field of telecommunications.

SPECTRUM MANAGEMENT

NTIA's Federal radio spectrum management activities, which account for a major part of our program activities, will continue to fulfill the Government's needs for frequency spectrum. The Government relies upon radio communications to provide a broad range of public services, including air traffic control, weather monitoring, law enforcement, and national defense. As both Government and nongovernment radio spectrum demands grow, managing this finite national resource efficiently becomes more and more important.

Department of Commerce
National Telecommunications and Information Administration
Salaries and Expenses
PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	0	0	0	0
Audiovisual products	0	0	0	0
Total	$ 0	$ 0	$ 0	$ 0

TELECOMMUNICATIONS RESEARCH

NTIA's laboratory and principal research arm, the Institute for Telecommunication Sciences, is the central U.S. government facility for scientific telecommunications research and engineering. Its primary functions are to meet Federal needs for telecommunications research and to provide technical analyses supporting NTIA policy positions. This includes providing information necessary to understand the complex nature of radio wave behavior, including developing state-of-the-art radio wave propagation models; advising and assisting government entities, both military and civilian, in applying telecommunications research and technology to best meet their needs; and developing and promoting telecommunication standards which ensure that Federal systems meet users' requirements. As a direct benefit of its major impact on government telecommunications applications, the laboratory also increases the availability of telecommunications research and technology to U.S. firms where it stimulates product development, service initiation, and the competitive growth of the industry. The laboratory is internationally recognized for its expertise in radio wave propagation and telecommunications standards specifications.

ADVANCED TELEVISION TECHNOLOGIES

NTIA's budget includes a program increase of $370 thousand, to permit NTIA to remain highly involved in removing obstacles to the development of advanced television systems technologies that are responsive to the needs of the U.S. marketplace and the competitive positions of U.S. firms. Government policy decisions will, among other things, establish standards, both national and international, and allocate frequency spectrum for advanced television. These seemingly technical decisions must permit U.S. firms to compete on an equal footing with foreign competitors, while allowing maximum opportunities for American manufacturers and service providers to participate in developing and producing advanced television systems.

To support advanced television development, the Institute for Telecommunication Sciences (ITS) will be undertaking propagation measurements and channel assignment studies of the television band to assess ways in which broadcasters may supplement their signals with assigned television frequencies to offer advanced television transmissions. ITS will also be developing technical criteria for assessing video quality, which are useful for comparing the relative merits of proposed television technologies and systems. NTIA will study the economic and policy implications of various standards proposals now before the Federal Communications Commission and its Advisory Committee on Advanced Television Service. Our goal is to add a valuable and impartial perspective to the analysis of available options through the sound technical base being developed in NTIA's program.

PUBLIC TELECOMMUNICATIONS FACILITIES

The 1991 budget request does not include funds for the Public Telecommunications Facilities Program (PTFP) or the Pan-Pacific Education and Cultural Experiments by Satellite Program (PEACESAT).

The PTFP was established in 1963 at a time when there was little public broadcasting. Since then, approximately $364 million in grants has been awarded, and access to public broadcasting has been greatly expanded. Last year NTIA completed a state-by-state analysis of public broadcasting coverage in the United States. Our findings indicate that approximately 94 percent of the population has access to at least one public television service, while 86 percent receives at least one public radio service. The program's goal of extending public broadcasting to a majority of the United States has thus been accomplished, and in light of the pressing need to further reduce the Federal budget deficit, we are not requesting continuing funding for this program.

The 1991 budget also requests no funds for the PEACESAT program. PEACESAT was a functioning system for 14 years. In light of budget constraints, we are not proposing that the Federal government continue to provide operating funds.

CONCLUSION

Mr. Chairman, the size of the industry that NTIA oversees is enormous and growing rapidly. The efforts just described present some of the highlights of NTIA's activities. In conclusion, we urge the Subcommittee to support NTIA's budget proposals for 1991. Thank you again for this opportunity to discuss NTIA's plans with you, and I am prepared to respond to any questions which you may have.

FY 1990 SEQUESTER

Mr. Dwyer. Thank you, and thank you for your statement.

How much was sequestered from your 1990 appropriations, and what was the impact?

Ms. Obuchowski. Sir, that figure was $198,000, and its impact was relatively severe. As you know, we are a relatively small agency, and almost our entire budget is in salaries and minimal amounts of expenses, so we have had to absorb basically a personnel loss. We have deferred hiring on several occasions.

Mr. Dwyer. Well, what has been the effect of that?

Ms. Obuchowski. Well, there are several programs that we would have liked to have gone into in greater detail. In our spectrum management area, we have had to defer specific modeling that we are attempting to do. We are pursuing funds from other Government resources to see if we can continue in that vein. We also have not been able to pursue some of the econometric work we would like to do in the policy environment.

We have deferred upgrading our spectrum measurement van, and at this point it is becoming a safety hazard. We are no longer actually driving the van. We are taking it to locations using other modes. We are shipping it to locations via train or trucking it places because we cannot actually drive the van.

SPECTRUM MANAGEMENT

Mr. Dwyer. Spectrum management sounds like it is one of your most important obligations. So I am surprised that you have let that suffer.

Ms. Obuchowski. Well, we are trying not to, sir. I agree with you, it is an $8 million aspect of our budget, which is basically the lion's share of our budget; and in terms of managing the Government frequencies, it is a very important obligation.

Mr. Dwyer. We tend to hear a lot about spectrum management and shortage of spectrum in our district offices, particularly as it concerns public safety groups and things of that nature. I would think that this is probably of the utmost importance, as reflected by the salary and personnel amount.

Ms. Obuchowski. You are right sir. For example, currently we are looking for ways within our budget to further support the Presidential initiative on drug control. There is a lot of public safety use of the spectrum in this particular environment, and we are putting together a program which is not related to this budget. We are just doing it out of our existing resources, to try to address that.

1991 FUNDING LEVELS

Mr. Dwyer. Now, what was your original request to OMB for 1991?

Ms. Obuchowski. Our 1991 request to the Secretary was $19,340,000, and our request to OMB was $16,037,000.

Mr. Dwyer. So they cut you back?

Ms. Obuchowski. They certainly did.

Mr. Dwyer. What type of impact will that have?

Ms. **Obuchowski**. Well, sir, there were several programs that we would have liked to have pursued in greater detail, and I will relate which they were.

Advanced television systems standards development, we had requested $1,200,000, and the impact of that will frankly be just less research in that specific area.

In the area of spectrum policies, again we would have liked to have done far more measurement in various locations around the country, you know, actually obtaining empirical data on the way spectrum is being utilized, and we haven't been able to do that.

We have tried to develop an integrated telecom evaluation facility out of our labs, basically finding ways to see how digital networks work together. We have been able to piece something together of that facility, basically using funds outside of the budget we are presenting to you here. We get approximately $7 million from other Government agencies, and we have used some of that to put together this facility, but it hasn't been as comprehensive as we would like.

So there are several areas where we have cut back, but I have highlighted a few.

Mr. **Dwyer**. Yes. You may want to expand upon this conversation for the record, and I would urge you to do that.

Ms. **Obuchowski**. We would welcome that opportunity.

[The information follows:]

Clarification of response on Funding Levels

NTIA's FY 1991 budget request to Congress is $15,252,000. NTIA's FY 1991 budget request to OMB was $16,037,000—a difference of $785,000. The intent of the OMB allowance was to provide a base program budget ($14,882,000) for FY 1991 that is comparable to the FY 1990 operating budget, including adjustments for FY 1990 and FY 1991 pay raises. In addition, OMB provided $370,000 of the $470,000 requested for the advanced television systems program increase. The reduction of $100,000 from the requested program increase reduces the research NTIA can accomplish.

NTIA AUTHORIZATION

Mr. **Dwyer**. Now, what is the status of your authorization legislation? Where is that?

Ms. **Obuchowski**. We have passed the House, and at this point we have not yet passed the Senate. It is our understanding from the Senate staff that a bill will be presented in the relatively near future.

PUBLIC TELECOMMUNICATIONS FACILITY PROGRAM

Mr. **Dwyer**. Now you are again proposing to eliminate the Public Telecommunications Facilities Grant Program, which incidentally has an authorization, so that is a perfect example of the intent of Congress, but the administration's proposal is to eliminate the program. Do you want to address that? Whose idea was it? Was it your idea, or was it OMB's, or was it the Department's idea?

Ms. **Obuchowski**. I think, in general, this is an OMB decision about budgetary priorities. At this point, about 94 percent of the country has public TV coverage, and so while I think this is a good program, there is a feeling that the funds should go to other priorities.

AGRICULTURAL SATELLITE CORPORATION

Mr. **Dwyer**. Are you familiar with the AGSAT proposal that is pending at the PTFP? What do you think of this proposal?

Ms. **Obuchowski**. Well, Mr. Chairman, I am going to be a little cautious here because, as you know, I am going to be the judge——

Mr. **Dwyer**. Don't be cautious. You are among friends.

[Laughter.]

Ms. **Obuchowski**. I will have to be the judge, and I don't want to leave myself open to having other applicants say that I am prejudging it, but it has many attractive features. At this point we have about 26 land grant universities hooked up, and our tentative impression is that it is a very positive development. We are trying to use the public TV funds in creative ways and ways that advance the technology base of the country, and this is certainly in line with that priority of mine and of Secretary Mosbacher.

We also, by the way, are exploring the possibility, if we were to grant such a program, of using it to connect up with Eastern Europe, where there is a lot of interest in agricultural assistance.

Mr. **Dwyer**. Well, I was going to get to that. But to me this is a very, very exciting program. It would seem to me it would be a real delivery of a public service. I would hope that——

Ms. **Obuchowski**. We will make your comments part of the record in terms of——

Mr. **Dwyer**. This is part of the record.

Ms. **Obuchowski**. I mean part of our record in terms of——

Mr. **Dwyer**. It will be part of the record at markup time, too, I can assure you. [Laughter.]

Thank you.

PUBLIC TELECOMMUNICATIONS FACILITIES PROGRAM

How many applications are pending in this area?

Ms. **Obuchowski**. We have received two hundred ninety-seven PTFP grant applications for FY 1990, sir, covering about $72 million——

Mr. **Dwyer**. Now you can understand why it has been authorized by Congress.

Ms. **Obuchowski**. I have received many, many letters from Congress concerning many of these applications. We have about $72 million worth of grant requests, and if we are to be funded, it is a matter really of granting one out of three.

Mr. **Dwyer**. We have a few more questions, but we are going to submit those questions to you and you can provide the answers for the record. We thank you for being here this morning.

Ms. **Obuchowski**. Well, thank you for the opportunity to testify. We are very proud of this agency and we are glad to get a hearing.

Mr. **Dwyer**. Good.

Ms. **Obuchowski**. Thank you.

Mr. **Dwyer**. All right. Goodbye, now.

This committee will stand in adjournment until 1:30 p.m. this afternoon.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

PUBLIC TELECOMMUNICATIONS FACILITIES PROGRAM

QUESTION:

You are again proposing to eliminate the public telecommunications facilities grant program using the rationale that further funding is unnecessary since about 95 percent of the country receives public television and radio broadcasts. What was the number and dollar amount of grant applications received during FY 1990 for these grant funds?

ANSWER:

For FY 1990, 297 applications have been received by NTIA's Public Telecommunications Facilities Program (PTFP) requesting $72,259,965.

QUESTION:

Please provide for the Record the number and dollar amount of grant applications received during the past five years so that we can better assess whether demand for the program still exists.

ANSWER:

PTFP Application History for the past five years:
(Dollars in Millions)

Fiscal Year	Applications Received	Amount
1990	297	$72.3
1989	276	56.0
1988	291	61.6
1987	322	83.2
1986	329	89.5

Presently, a review is being conducted of all the FY 1990 applications to ensure the applications meet the eligibility requirements as it pertains to the PTFP Rules and Regulations.

QUESTION:

Is there currently a backlog of grant applications pending? If so, how can you justify eliminating the program even if 95 percent of the country already has access to public broadcasting?

ANSWER:

In FY 1989, 139 of the 276 applicants were not funded. Of the 139 applicants that were not funded in FY 1989, 56 reactivated their applications for the current grant cycle. PTFP considers the 56 reactivated applications to be "pending" from the last year's grant cycle.

Of the 56 reactivated applications that were not funded in FY 1989, 31 were proposals designed to improve and replace equipment at existing stations and facilities. It is and has been the Administration belief that replacement of obsolete or worn-out equipment is not the role of the Federal Government. Another 13 applications were considered special applications or Priority Other (e.g., unique and innovative services, providing service to minorities, providing instructional services).

Only 9 applications designed to bring a first service public radio or television signal to an area unserved reactivated their proposals for the present funding cycle. NTIA was not able to fund 8 of the 9 applications last grant cycle because the FCC was not able to assure NTIA that the associated Commission authorization was grantable.

QUESTION:

How many grant awards over the past five years have been for new stations versus grants to finance improvements or replacement of facilities at existing stations?

ANSWER:

The highest funding priority within the PTFP Program is to provide a first radio or television signal to an unserved geographic area. It is and has been the Administration belief that replacement of obsolete or worn-out equipment is not the role of the Federal Government.

Fiscal Year	Grants for New Stations	Grants to Improve/Replace Existing Facilities
1989	43	83
1988	32	82
1987	46	71
1986	48	97
1985	49	80

QUESTION:

Please provide for the Record a breakdown for the past 5 years of the percentage of grants made for public television versus radio facilities.

ANSWER:

Breakout of the Total Grants Awarded

Fiscal Year	Radio	Television
1989	38%	62%
1988	43%	57%
1987	43%	57%
1986	37%	63%
1985	51%	49%

SALARIES AND EXPENSES

HDTV

QUESTION:

You are proposing to continue - through FY 1995 - research and analysis in the area of HDTV; however, the Director of the Defense Advanced Research Projects Agency has written to the Committee stating that he has not been able to obtain the views of the Department of Commerce as to what extent the Federal Government should play a role in developing HDTV with commercial applications. Why should the Committee approve your requested increase of $370,000 and four positions for HDTV research when the Department has not taken a position on developing HDTV with commercial applications?

ANSWER:

The Assistant Secretary for Technology Policy has assurances from the Director of DARPA that Commerce is cooperating with DARPA on the HDTV issue.

The Department of Commerce is promoting ways to improve U.S. industry competitiveness. As a part of this, Commerce is in the process of assembling a broad competitive policy package for high technologies, including HDTV, that will consist of initiatives to help support the competitiveness of U.S. technology companies. This package will focus on private sector activities rather than the defense-related goals of DARPA. Further, NTIA's effort is independent of DARPA's activities.

NTIA's budget request is important to promoting the further development of HDTV. NTIA will be undertaking propagation measurements and channel assignment studies of the television band to assess ways in which broadcasters may supplement their signals with assigned television frequencies to offer HDTV.

In FY 1991, NTIA will begin an analysis to develop and define the necessary objective performance measures of transmission modes alternatives by examining the components of video encoding, compression, and transmission techniques. NTIA's work under the FY 1991 initiative would ultimately lead to standardization of these performance measures and their implementation in microcomputer-based test equipment.

NTIA will continue to coordinate with the FCC Advisory Committee on Advanced Television Services, DARPA, MIT Media Laboratory and others. As an ex officio member of the FCC Advisory Committee on Advanced Television Service, NTIA has been actively coordinating with the FCC on HDTV issues. NTIA has discussed numerous issues with the FCC staff and private parties involved in the development of recommendations for technical aspects of HDTV, including frequency use, radio signal formats, modulation, power levels, and antenna characteristics. Where appropriate, NTIA will provide guidance to the FCC on testing methodologies and examine the outputs for applications to NTIA's ongoing work in this area.

NTIA will use these data and the results of the Advisory Committee's conclusions to refine and extend its technical work in defining performance characterizations of HDTV transmission alternatives, evaluation criteria, and trade-off studies that include quality testing. The technical analyses will consider specifications for advanced video performance, spectrum use and efficiency applications, and cost factors associated with implementation with such alternatives.

NTIA will continue to participate in developing the appropriate specifications in standards-setting bodies (e.g., American National Standards Institute (ANSI), International Telegraph and Telephone Consultative Committee, and International Radio Consultative Committee) to assure that overall U.S. interests in the advocacy of HDTV services are being satisfied.

QUESTION:

Explain how NTIA's past efforts have been coordinated with the FCC's ongoing work with HDTV and how will NTIA's future work in this area complement the FCC's role in HDTV research?

ANSWER:

Commerce and the FCC both use Advanced Television (ATV) to address a broad set of technical and policy issues that include High Definition Television (HDTV). As an ex officio member of the FCC's Advisory Committee on Advanced Television Service, and in other capacities, NTIA has been coordinating actively with the FCC on ATV issues. NTIA has discussed numerous issues with the FCC staff and private parties involved in the development of recommendations for technical aspects of ATV, including frequency use, radio signal formats, modulation, power levels, and antenna characteristics. The Advisory Committee's recommendations will provide a basis for promulgations of the FCC rules on ATV broadcasting.

NTIA also coordinates with the Advanced Television Test Center (ATTC), which is supporting the FCC by examining and evaluating alternative ATV systems proposed by private industry. The ATTC plans to produce a set of video tapes representing the outputs of each such system as influenced by various propagation and interference effects. These effects will initially be simulated in a laboratory environment. The ATTC plans to oversee the conduct of over-the-air ATV tests after the laboratory tests have been completed. The ATTC results will be evaluated by human viewer panels.

When appropriate, NTIA will provide guidance to the FCC on testing methodologies and examine the outputs for application to our ongoing work in this area. Our technical emphasis will be on (1) the performance characterization of ATV transmission alternatives, (2) defining evaluation criteria, and (3) conducting trade-off studies that include performance (quality) testing. From these efforts, NTIA will develop further objective, performance-based measures to evolve performance specifications for advanced video systems following concepts initiated in NTIA's laboratory which have gained international recognition. This work is an essential ingredient in the development of workable transmission standards for ATV. Activities also include measurements and technical studies (e.g., signal protection analysis, compression techniques) needed to assess the overall performance of ATV. In addition, NTIA will also look at the policy and economic impacts of advocating particular standards for different ATV transmission systems. NTIA's efforts are crucial elements in better understanding U.S. opportunities in this rapidly expanding market, and provide a strong basis for determining the viable options for future U.S. policy in advanced video systems.

QUESTION:

When will the issues surrounding HDTV be resolved so that NTIA's research efforts can be phased out?

ANSWER:

Certain portions of NTIA's research efforts are directly connected to current activity relating to the selection of an advanced television broadcast transmission standard. As such, these activities will come to an end when the FCC chooses such a standard. Examples of these efforts include specific propagation studies performed for the Advanced Television Testing Center (ATTC) and the NTIA study of the policy implications of the various advanced television transmission standards.

However, we do not anticipate that most of NTIA's research efforts relating to advanced video technology will be phased out in the foreseeable future. Our research office, the Institute for Telecommunication Sciences (ITS), maintains the Nation's most advanced radio propagation laboratory and plans to continue to develop substantial video communication performance measurement expertise to support the ATV standards process as it develops. NTIA's radio propagation prediction and measurement capabilities will continue to be used to assess ATV broadcasting alternatives with respect to signal quality and spectrum efficiency. NTIA's video quality studies are developing automated performance assessment methods that will ultimately assist in facilities implementation of advanced video technologies in the United States. In addition, NTIA's ongoing work on spectrum policy and the development of the U.S. telecommunications infrastructure will address ATV issues.

NTIA also has a vital role to play in heading U.S. involvement in the development of international standards for Broadband Integrated Services Digital Networks (B-ISDNs). These advanced networks will ultimately provide universal access to a wide range of video services, including HDTV, video telephony, video conferencing, and high resolution graphics distribution. In addition, NTIA leads the national and international standards groups responsible for specifying B-ISDN performance and is spearheading the development of objective video quality measures within the U.S. T1 Standards Committee, the ANSI technical committee overseeing telecommunications (including data communications) network issues.

NTIA's research efforts will continue to support policies that enhance U.S. opportunities in a wide array of advanced video technology innovations and applications. These efforts will most likely entail many years of intense work on the part of NTIA.

PUBLIC TELECOMMUNICATIONS FACILITIES PROGRAM

PEACESAT

QUESTION:

What is the status of the grant for the Pan-Pacific Education and Cultural Experiments by Satellite Program (PEACESAT)?

ANSWER:

A grant amendment to the University of Hawaii (UH) totaling nearly $700,000 to purchase the user earth stations for the PEACESAT program will be awarded in March, 1990. This grant will be used to design and construct 26 earth stations for use with the National

Oceanic and Atmospheric Administration (NOAA) GOES-3 satellite to restore PEACESAT service by mid-1990. Service from the GOES-3 satellite is projected to continue until 1995 while NTIA continues to explore options to provide PEACESAT service beyond GOES-3.

QUESTION:

How much has been obligated to date for the program, and what has been accomplished?

ANSWER:

In FY 1988, the first year of PEACESAT funding, obligations totaled $205,393. In FY 1989 they were $463,314. Through the end of January (FY 1990), obligations were $25,550 for total program obligations of $694,257. Approximately $700,000 should be obligated in April 1990 for a grant to the University of Hawaii.

PEACESAT service was reestablished in FY 1989 on the National Aeronautics and Space Administration (NASA) ATS-1 satellite. However, since that satellite has no station-keeping fuel, it continued to slowly drift eastward across the Pacific and had to be shut down in December 1989 before it began to interfere with other satellites. NTIA entered into a Memorandum of Agreement with the National Oceanic and Atmospheric Administration (NOAA) and NASA to provide satellite capacity and associated telecommunications, data acquisition, facilities, and services for the PEACESAT project. NTIA, NOAA, and NASA intend to provide support for the PEACESAT project for an interim period by relocating a NASA GOES satellite from its current position to a location which can provide communications to the Pacific islands.

National Endowment for Children's Educational Television

QUESTION:

Last year the Senate proposed an appropriation of $2.5 million for a national endowment for children's educational television. This item was deleted in the conference committee because of a lack of an authorization. What is the status of the authorization for this program?

ANSWER:

In August 1989, the Senate passed legislation (S. 797) that would authorize an appropriation of $10,000,000 for FY 1990 for the national endowment for children's television. That legislation was sent to the House and referred to the Committee on Energy and Commerce, which has not taken action on it.

QUESTION:

What is the Administration's position on this proposal?

ANSWER:

The Administration has not taken a position on this issue.

QUESTION:

If it is authorized, should it be funded through NTIA?

ANSWER:

If the program is funded through NTIA, we will ensure that it is administered efficiently and responsibly.

SALARIES AND EXPENSES

Modified Final Judgment

QUESTION:

What is the status of NTIA's and the Department's Inquiry into the Modified Final Judgment (MFJ) issue concerning the Bell Operating Companies?

ANSWER:

NTIA is seeking to understand both the broad range of views on current legislative proposals and the ultimate public interest to be served. We have met with representatives of different industry segments and consumer groups to hear their concerns and will continue to do so.

NTIA has been participating in an effort within the Administration to re-examine, generally, whether modifications to the Consent Decree are now appropriate, and more specifically, whether particular legislative proposals merit Administration support. NTIA is attempting to evaluate the potential benefits and costs for the United States of continuing the Decree's restrictions.

QUESTION:

Have you studied the effect of the MFJ restrictions on the telecommunications trade balance, and if so, what have you concluded?

ANSWER:

NTIA has not recently conducted an independent examination of the trade effects of the MFJ restrictions. However, in a 1987 study, NTIA Trade Report: Assessing the Effects of Changing the AT&T Antitrust Consent Decree, NTIA concluded that removing restrictions on the Bell companies would not generally risk significant adverse trade effects, and in at least one area, information services, removal would have a positive effect.

NTIA is cooperating with other agencies within Commerce and other Departments of the Executive Branch in taking a fresh look at trade concerns in an Administration review of MFJ issues. However, the Administration has not yet reached a conclusion on this issue.

TUESDAY, MARCH 6, 1990.

ECONOMIC DEVELOPMENT ADMINISTRATION

WITNESSES

JAMES L. PERRY, ACTING ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT

SWIFT TARBELL III, DEPUTY ASSISTANT SECRETARY FOR GRANT PROGRAMS

JAMES H. MARX, CHIEF, CREDIT AND DEBT MANAGEMENT DIVISION

JOSEPH M. LEVINE, CHIEF COUNSEL

RUTH L. KLEINFELD, DEPUTY ASSISTANT SECRETARY-DESIGNATE FOR LOAN PROGRAMS

VINCE GOODMAN, BUDGET OFFICER

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next we have the Economic Development Administration. Their request is for $20 million for administrative costs, and nothing for grants. This is a reduction of $5,366,000 below what we had last year for salaries and expenses, and nothing for the $188,556,000 that was for grants.

We will insert the budget justifications submitted in support of this request into the record at this point.

[The justifications follow:]

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION

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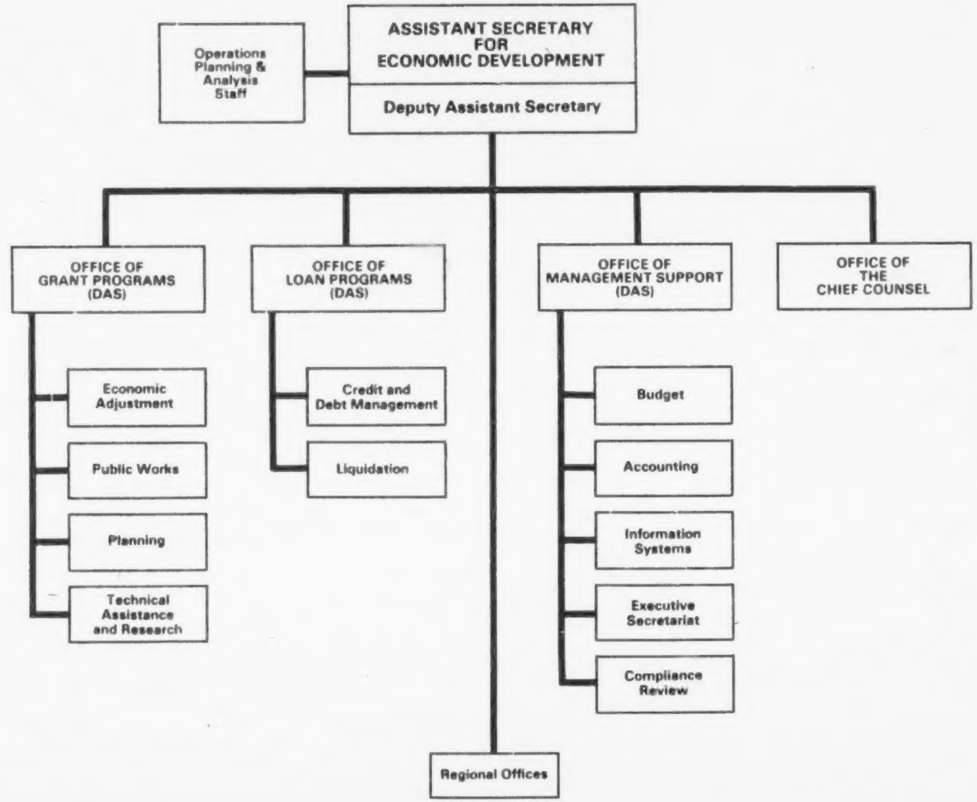
January 1990

U.S. DEPARTMENT OF COMMERCE
Economic Development Administration


Operations Planning & Analysis Staff
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
Deputy Assistant Secretary
OFFICE OF GRANT PROGRAMS (DAS)
Economic Adjustment
Public Works
Planning
Technical Assistance and Research
OFFICE OF LOAN PROGRAMS (DAS)
Credit and Debt Management
Liquidation
Regional Offices
OFFICE OF MANAGEMENT SUPPORT (DAS)
Budget
Accounting
Information Systems
Executive Secretariat
Compliance Review
OFFICE OF THE CHIEF COUNSEL

GENERAL STATEMENT

This budget requests funding and staffing support needed to phase out the programs of the Economic Development Administration (EDA). The Office of Grants and Loans Administration will be established within the Office of the Secretary to monitor and close out existing grants, loans and loan guarantees for EDA as well as other Commerce programs being proposed for termination.

The programs of the Economic Development Administration were authorized by the Public Works and Economic Development Act of 1965 as amended, and the Trade Act of 1974 in order to provide grants, loans and loan guarantees to economically distressed areas. The Administration proposes to terminate EDA beginning in FY 1991.

The following is a comparison of the FY 1990 appropriation currently available and the request for FY 1991:

	Appropriation Currently Available		1991 Estimate		Increase/ (Decrease)		Perm. Emp. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Grants and loans administration [Salaries and expenses]	360	$25,356	160	$20,000	(200)	($5,356)	330
Economic development assistance programs...............	0	188,556	0	0	0	(188,556)	0
Total..	360	213,912	160	20,000	(200)	(193,912)	330

The President's FY 1991 Budget proposes termination of EDA programs for the following reasons:

1. Funding decisions for local economic development projects should be the responsibility of state and local governments and/or private investors.
2. Reduced unemployment rates reflect the success of the Administration's policies in relying on the private sector for job creation.
3. EDA's mandate to help distressed areas is undermined by the fact that more than 80 percent of U. S. counties are eligible for EDA assistance.

This submission describes existing EDA programs. Other programs proposed for consolidation into the Office of Grants and Loans Administration are described in the International Trade Administration, National Telecommunications and Information Administration and National Oceanic and Atmospheric Administration submissions.

The amounts requested will provide necessary staffing for monitoring ongoing projects, collecting debts owed to the Government, and for all other functions associated with an orderly phaseout of the Economic Development Administration. Employees responsible for initiating or coordinating new projects and programs will be released on or about November 30, 1990.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Summary of Adjustments to Base:					
	Appropriation enacted, 1990	Pos./BA	360	$25,475		
		FTE/Obl.	340	26,267		
	Sequester applied, 1990	Pos./BA	0	(119)		
		FTE/Obl.	0	(119)		
	Appropriation currently available, 1990	Pos./BA			360	$25,356
		FTE/Obl.			340	26,148
	FY 1991 Adjustments to Base:					
EDA-6	Adjustment for 1990 pay increase and related costs		0	610		
EDA-6	Other cost changes, net		0	639		
	Subtotal, adjustments to base				0	1,249
	1991 Base	Pos./BA			360	26,605
		FTE/Obl.			340	27,397

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Comparison by subactivity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
EDA-13	Executive Direction	Pos./BA	26	$1,271	26	$1,489	26	$1,561	6	$1,017	(20)	($544)
		FTE/Obl.	20	1,215	23		23		10		(13)	
EDA-17	Grant Programs	Pos./BA	41	2,329	41	2,396	41	2,512	23	2,009	(18)	(503)
		FTE/Obl.	43	2,317	37		37		27		(10)	

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

	Comparison by subactivity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
EDA-22	Loan Programs..............	Pos./BA	24	$1,380	13	$692	13	$761	4	$647	(9)	($114)
		FTE/Obl.	24	1,319	11		11		7		(4)	
EDA-28	Management Support.........	Pos./BA	56	8,492	56	8,304	56	8,681	28	7,305	(28)	(1,376)
		FTE/Obl.	51	8,238	49		47		31		(16)	
EDA-34	Regional Operations........	Pos./BA	213	11,270	213	12,475	213	13,090	92	9,022	(121)	(4,068)
		FTE/Obl.	203	11,542	207		209		116		(93)	
	Subtotal, direct...........	Pos./BA	360	24,742	349	25,356	349	26,605	153	20,000	(196)	(6,605)
		FTE/Obl.	341	24,631	327		327		191		(136)	
	Reimbursables.............	Pos./BA	0	0	11	0	11	0	7	0	(4)	0
		FTE/Obl.	2	141	13	792	13	792	9	635	(4)	(157)
	Total......................	Pos./BA	360	24,742	360	25,356	360	26,605	160	20,000	(200)	(6,605)
		FTE/Obl.	343	24,772	340	26,148	340	27,397	200	20,635	(140)	(6,762)

Department of Commerce
Economic Development Administration
Grants and Loans Administration
SUMMARY OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

		Personnel	Amount
ESTIMATED COST CHANGES			
11.0	Personnel compensation	0	$815
12.1	Civil Service Retirement System (CSRS), net	0	7
	FERS basic benefits contributions	0	104
	Thrift Savings Plan	0	13
	OASDI	0	45
	Medicare	0	13
	Health insurance premiums	0	160
	Life insurance	0	2
	Employees' Compensation Fund	0	(54)
23.1	Rent payments to GSA	0	87
23.3	Federal Telecommunications System - 2000 (FTS-2000)	0	(124)
	Postal services by USPS	0	24
24.0	Printing and reproduction	0	5
25.0	Other services (Working Capital Fund)	0	149
26.0	Supplies and materials	0	3
	Total adjustments to base	0	1,249

Department of Commerce
Economic Development Administration
Grants and Loans Administration
JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

		Personnel	Amount
Adjustment for 1990 pay increase and related costs:			
Total cost in 1990 of pay increase	$454,368		
Less amount absorbed in FY 1990	-454,368		
Anticipated FY 1990 pay increase supplemental	0		
Amount in 1991 to provide full-year cost of pay increase	609,892		
Less amount absorbed	0		
Total, adjustment for 1990 pay increase		0	$610

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, EDA is absorbing the full cost of this pay increase.

Other Cost Changes, net

11.0 Personnel Compensation and Benefits (12.1)

		Personnel	Amount
Adjustment for 1991 pay increases and related costs:			
Total cost in 1991 of 1991 pay increase	562,148		
Less amount absorbed	-281,074		
Subtotal, adjustments for 1991 general pay increase	281,074		
Total cost in 1991 of SES pay increase	68,491		
Less amount absorbed	-34,245		
Subtotal, adjustment for 1991 SES increase	34,246		
Total adjustment for 1991 pay increase		0	315

The President's Budget includes an estimated general pay increase of 3.5 percent effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22 percent, with 50 percent of the cost absorbed.

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	Personnel	Amount
Extra compensable day:		
The cost of one extra compensable day in FY 1991 (261) as compared to FY 1990 (260) was derived by dividing the total compensation ($14,201,000) and applicable benefits ($1,508,000) as shown in the FY 1990 Congressional Submission by 260. The object class distribution is as follows: personnel compensation, $54,000; CSRS, $3,000; FERS, $2,000; and OASDI, $1,000.	0	$60
12.1 Benefits:		
Civil Service Retirement System (CSRS)	0	(39)
As more employees are hired in the new Federal Employees Retirement System, less funds will be required for the CSRS. This amount reflects the difference between FY 1990 and FY 1991 requirements as shown in the FY 1990 Congressional Submission based on CSRS participation decreasing from 87.4% in 1990 to 80.5% in 1991. The 7% CSRS contribution rate applied to the 1990 total gross salaries of $14,201,000 yields a decrease of $38,774.		
FERS basic benefits contributions	0	73
The cost of agency contributions to the Federal Employees Retirement System (FERS) will increase due to higher participation and contribution rates. The FY 1991 increase is estimated to be $72,995. This amount was derived by taking the difference between the FY 1990 and FY 1991 contribution and participation rates shown in the FY 1990 Congressional Submission and applying it to the total gross salaries in 1990 of $14,201,000.		
Thrift Savings Plan	0	10
The cost of agency contributions to the FERS Thrift Savings Plan will increase due to higher participation rates. The FY 1991 increase is estimated to be $10,384. This amount was derived by taking the difference between the FY 1990 and FY 1991 participation rates as shown in the FY 1990 Congressional Submission and applying it to the total gross salaries in 1990 of $14,201,000.		

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	Personnel	Amount
Old Age Survivors and Disability Insurance (OASDI)	0	$36
The agency must contribute funds for OASDI for FERS employees. The FY 1991 increase is estimated to be $35,985. This amount was derived by taking the difference between the FY 1990 and FY 1991 contribution and participation rates as shown in the FY 1990 Congressional Submission and applying it to the total gross salaries in 1990 of $14,201,000.		
Medicare	0	4
All employees are subject to Hospital Insurance. The cost of agency contributions for Hospital Insurance will increase due to higher salary levels subject to the tax. The FY 1991 increase is estimated to be $4,036. This amount was derived by taking the difference between the FY 1990 and FY 1991 salaries subject to the tax as shown in the FY 1990 Congressional Submission and multiplying it by the tax of 1.45%.		
Health insurance premiums	0	160
The Office of Personnel Management has announced an increase in health insurance premiums. The average rate increase of 28% was then applied to the amount of $573,000 as shown in the FY 1990 Congressional Submission for an increase of $160,440.		
Employees' Compensation Fund	0	(54)
The decrease in the repayment to the Employees' Compensation Fund is the result of lower costs in the year ending June 30, 1989 than in the year ending June 30, 1988. The 1989 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund, in 1991 pursuant to Public Law 86-767, as amended.		
23.1 Rent payments to GSA	0	87
The Office of National Programs has provided an estimated increase factor of 4.4 percent in 1991 for currently occupied space. The factor was applied to the FY 1990 estimate of $1,967,000 as shown in the FY 1990 Congressional Submission for an increase of $86,548.		

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES
(Dollar amounts in thousands)

	Personnel	Amount
23.3 Communications, utilities and miscellaneous charges:		
Federal Telecommunications System - 2000 (FTS-2000)	0	($124)
Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.		
Postal services by USPS	0	24
In FY 1989, EDA conducted an extensive analysis of its mail costs. The findings, as confirmed by USPS, indicated the agency's budgeted amount of $28,000 was $24,000 less than actual costs being incurred. This adjustment reflects those findings.		
24.0 Printing and reproduction	0	5
The cost of printing (both paper and labor) continues to increase. GPO has advised us that printing will increase seven percent in FY 1991. The resulting factor is an increase of $4,690 over the FY 1990 base of $67,000.		
25.0 Other services (Working Capital Fund-WCF)	0	79
To offset the increased inflationary costs associated with the Department's centralized WCF, an adjustment of $79,000 is required in FY 1991.		
26.0 Supplies and materials	0	3
The cost of supplies and materials were increased by applying the GNP deflator of 4.0 percent to the 1990 amount of $81,000 as shown in the FY 1990 Congressional Submission resulting in an increase of $3,240.		

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by subactivity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction................	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Grant Programs.....................	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Loan Programs......................	FTE/Obl.	0	0	11	$638	11	$638	7	$475	(4)	($163)
Management Support.................	FTE/Obl.	2	$141	2	154	2	154	2	160	0	6
Regional Operations................	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Total............................	FTE/Obl.	2	141	13	792	13	792	9	635	(4)	(157)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual Amount	1990 Currently Available Amount	1991 Base Amount	1991 Estimate Amount	Increase/ (Decrease) over 1991 Base Amount
Total obligations..............................	$24,772	$26,148	$27,397	$20,635	($6,762)
Financing:					
Offsetting collections from:					
Federal funds..................................	(141)	(792)	(792)	(635)	157
Trust funds....................................	0	0	0	0	0
Non-Federal sources............................	0	0	0	0	0
Recoveries.....................................	0	0	0	0	0
Unobligated balance, start-of-year..............	0	0	0	0	0
Unobligated balance transferred.................	0	0	0	0	0
Unobligated balance, end-of-year................	0	0	0	0	0
Unobligated balance lapsing.....................	111	0	0	0	0
Budget Authority................................	24,742	25,356	26,605	20,000	(6,605)
Transferred to/from other accounts...........	0	0	0	0	0
Sequester....................................	0	119	0	0	0
Appropriation...................................	24,742	25,475	26,605	20,000	(6,605)

APPROPRIATION LANGUAGE AND CODE CITATIONS

Delete the heading, Economic Development Administration, appropriation title, "Salaries and expenses" and appropriation language, and under the heading, General Administration, insert appropriation title, "Grants and loans administration."

This will change the account title from "Salaries and expenses" to "Grants and loans administration" and establish within the Office of the Secretary a new account, whose personnel will continue the phaseout of EDA and other grant and loan programs for which program funds are no longer appropriated.

Insert new language as follows: "For necessary expenses of administering outstanding grants, loans, and loan guarantees for discontinued programs assigned to the Secretary of Commerce, $20,000,000."

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction:											
Assistant Secretary for Economic Development	Pos./BA	7	$279	7	$426	6	$461	0	$251	(6)	($210)
	FTE/Obl.	4	226	5		6		1		(5)	
Deputy Assistant Secretary for Economic Development	Pos./BA	3	138	3	217	4	257	0	198	(4)	(59)
	FTE/Obl.	1	71	3		3		1		(2)	
Operations Planning and Analysis	Pos./BA	7	344	7	354	7	374	2	304	(5)	(70)
	FTE/Obl.	6	377	6		6		3		(3)	
Chief Counsel	Pos./BA	9	510	9	492	9	469	4	264	(5)	(205)
	FTE/Obl.	9	541	9		8		5		(3)	
Total	Pos./BA	26	1,271	26	1,489	26	1,561	6	1,017	(20)	(544)
	FTE/Obl.	20	1,215	23		23		10		(13)	

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic Development Assistance Programs

Subactivity: Executive Direction

Goals and Objectives

Goals: To effectively manage the agency consistent with the intent of Congress and as mandated in statute.

Objective: To provide essential policy guidance and management to ensure an orderly phaseout of terminated grant and loan programs.

Base Program

This subactivity consists of the Assistant Secretary who directs the EDA programs, coordinates the Agency's congressional and public affairs functions and is responsible for the conduct of all economic development activities, including overall direction and coordination of the regional offices of EDA, subject to the policies and directives prescribed by the Secretary of Commerce. The Deputy Assistant Secretary assists the Assistant Secretary in all matters affecting EDA, serves as EEO officer, and performs the duties of the Assistant Secretary during the latter's absence. The Operations Planning and Analysis staff provides technical support to the Assistant Secretary and Deputy Assistant Secretary in the areas of agency-wide program and policy planning, development and evaluation. The Office of Chief Counsel renders legal services to the Assistant Secretary and staff of EDA. It also has primary responsibility for the preparation, coordination and clearance of all legislation, regulations and external orders.

DECREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Executive Direction	Pos./BA	26	$1,561	6	$1,017	(20)	($544)
	FTE/Obl.	23		10		(13)	

The Administration proposes to terminate EDA beginning in FY 1991.

During 1991, this subactivity will continue to provide essential legal functions to ensure an orderly phaseout of terminated grant, loan and loan guarantee programs. In addition, a residual staff will be retained in Operations Planning and Analysis to complete the systems enhancement initiative targeted for completion in FY 1991.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Development Assistance Programs
Subactivity: Executive Direction
Program Change: Phaseout of EDA Program

Object Class		1991 Increase/ (Decrease) Oblig.
11	Personnel compensation:	
11.1	Full-time permanent	($631)
11.5	Other personnel compensation	(3)
11.9	Total personnel compensation	(634)
12.1	Civilian personnel benefits	(115)
13	Benefits for former personnel	268
21	Travel and transportation of persons	(29)
22	Transportation of things	(2)
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	(25)
25	Other services	(3)
26	Supplies and materials	(4)
31	Equipment	0
99	TOTAL	(544)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Development Assistance Programs
Subactivity: Executive Direction
Program Change: Phaseout of EDA Program

Title:	Grade	Number	Annual Salary	Total Salaries
Assistant Secretary for Economic Development	EX-4	1	$104,500	$104,500
Deputy Assistant Secretary for Economic Development	ES-3	1	92,000	92,000
Economist	GM-15	1	79,600	79,600
Program Analysis Officer	GM-15	1	79,600	79,600
Attorney-Advisor	GM-15	1	79,600	79,600
Congressional Liaison Officer	GM-15	1	63,300	63,300
Special Assistant	GM-14	2	52,050	104,100
Supervisory Program Analyst	GM-14	1	67,000	67,000
Program Analyst	GS-13	1	50,400	50,400
Attorney-Advisor	GS-13	1	50,400	50,400
Public Affairs Specialist	GS-12	1	37,000	37,000
Program Analyst	GS-11	1	30,900	30,900
Paralegal Specialist	GS-11	1	30,900	30,900
Secretary	GS-9	1	25,500	25,500
Secretary	GS-8	1	25,300	25,300
Secretary	GS-7	2	25,100	50,200
Clerk-Stenographer	GS-7	1	25,100	25,100
Clerk-Typist	GS-2	1	12,300	12,300
Total		(20)		(1,007,700)
Plus FTE employment pre-Reduction-in-Force		7		376,700
Total full-time equivalent: Obligations		(13)		(631,000)

Personnel Data

Full-time Equivalent Employment:	Number
Full-time permanent	(13)
Other than full-time permanent	0
Total	(13)

Authorized Positions:	Number
Full-time permanent	(20)
Other than full-time permanent	0
Total	(20)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Grant Programs:											
Deputy Assistant Secretary for Grant Programs	Pos./BA	6	$243	6	$277	6	$302	3	$201	(3)	($101)
	FTE/Obl.	5	208	5		5		4		(1)	
Economic Adjustment	Pos./BA	4	319	6	329	6	356	4	290	(2)	(66)
	FTE/Obl.	5	297	5		5		4		(1)	
Public Works	Pos./BA	17	766	17	776	17	804	9	630	(8)	(174)
	FTE/Obl.	17	800	15		15		10		(5)	
Planning	Pos./BA	5	379	5	375	5	387	3	348	(2)	(39)
	FTE/Obl.	6	352	5		5		4		(1)	
Technical Assistance and Research	Pos./BA	9	622	7	639	7	663	4	540	(3)	(123)
	FTE/Obl.	10	660	7		7		5		(2)	
Total	Pos.BA	41	2,329	41	2,396	41	2,512	23	2,009	(18)	(503)
	FTE/Obl.	43	2,317	37		37		27		(10)	

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic Development Assistance Programs

Subactivity: Grant Programs

Goals and Objectives

Goals: Orderly phaseout of all economic development assistance grants and the completion of evaluations currently in process.

Objective: To monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law. To assist the Inspector General's staff with audit closeouts.

Base Program

The Deputy Assistant Secretary for Grants Programs provides coordinated direction of headquarter's activities related to economic adjustment, public works, planning, technical assistance and research projects; develops, in conjunction with the Office of the Inspector General, criteria for audits, including adherence to EDA policy and programmatic requirements; and develops policies and procedures for the implementation of all EDA grant programs.

The Economic Adjustment program provides grants to local areas to develop and/or implement comprehensive adjustment strategies. These strategies are designed either to anticipate and prevent economic dislocation or to re-establish employment opportunities and economic stability as soon as possible after dislocation occurs. Approximately 50% of funds appropriated are used for revolving loan fund grants.

The Public Works program provides grants for public investment programs. The staff assures that approved projects support local development objectives and that they are implemented regionally through effective management procedures. In addition, the staff oversees post-approval management of all public investments to assure that economic development goals are met as soon as is practical. The staff monitors the construction, financial, administrative, and statutory aspects of each project on a continuing basis.

The Planning program provides planning grants to states, cities, districts, areas and Indian tribes.

The Technical Assistance and Research program provides grants to communities, non-profit organizations, state and local governments and other eligible applicants to overcome specific economic development problems. In addition, the program conducts external and in-house research and analysis to increase the general understanding of local and regional economic development problems. The external program consists of grants, interagency agreements or cooperative agreements with educational and other non-profit institutions, private businesses, and private individuals. In-house activities include research, review and dissemination, analyses conducted in conjunction with the contractual research program, and work performed to meet other EDA analytic needs.

DECREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Grant Programs	Pos./BA	41	$2,512	23	$2,009	(18)	($503)
	FTE/Obl.	37		27		(10)	

The Administration proposes to terminate EDA beginning in FY 1991.

During 1991, this subactivity will monitor and close out existing grants. Grant monitoring for Economic Adjustment and Public Works will continue through FY 1995; all other grant monitoring activities will have been completed by the end of FY 1992.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Development Assistance Programs
Subactivity: Grant Programs
Program Change: Phaseout of EDA Program

Object Class		1991 Increase/ (Decrease) Oblig.
11	Personnel compensation:	
11.1	Full-time permanent	($622)
11.5	Other personnel compensation	(4)
11.9	Total personnel compensation	(626)
12.1	Civilian personnel benefits	(92)
13	Benefits for former personnel	257
21	Travel and transportation of persons	(24)
22	Transportation of things	(2)
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	(9)
25	Other services	(3)
26	Supplies and materials	(4)
31	Equipment	0
99	TOTAL	(503)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Development Assistance Programs
Subactivity: Grant Programs
Program Change: Phaseout of EDA Program

Title:	Grade	Number	Annual Salary	Total Salaries
Deputy Assistant Secretary for Grant Programs	ES-3	1	$92,000	$92,000
Grants Policy Officer	GM-14	1	52,050	52,050
Program Management Specialist	GS-12	5	37,000	185,000
Program Assistant	GS-11	1	30,900	30,900
Secretary	GS-8	1	25,300	25,300
Civil Engineer	GS-13	1	50,400	50,400
Program Management Specialist	GS-11	1	30,900	30,900
Program Management Specialist	GS-7	1	25,100	25,100
Supervisory Community Planner	GM-14	1	52,050	52,050
Community Planner	GS-14	1	52,050	52,050
Community Planner	GS-13	1	50,400	50,400
Economist	GS-14	1	52,050	52,050
Technical Assistance Program Specialist	GS-13	2	50,400	100,800
Total		(18)		(799,000)
Plus FTE employment pre-Reduction-in-Force		8		177,000
Total full-time equivalent: Obligations		(10)		(622,000)

Personnel Data	Number
Full-time Equivalent Employment:	
Full-time permanent	(10)
Other than full-time permanent	0
Total	(10)
Authorized Positions:	
Full-time permanent	(18)
Other than full-time permanent	0
Total	(18)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Loan Programs:											
Deputy Assistant Secretary for Loan Programs	Pos./BA	2	$161	2	$142	2	$167	0	$87	(2)	($80)
	FTE/Obl.	2	157	2		2		1		(1)	
Credit and Debt Management	Pos./BA	11	669	11	550	11	594	4	560	(7)	(34)
	FTE/Obl.	11	559	9		9		6		(3)	
Liquidation*	Pos./BA	11	550	0	0	0	0	0	0	0	0
	FTE/Obl.	11	603	0	0	0	0	0	0	0	0
Total	Pos./BA	24	1,380	13	692	13	761	4	647	(9)	(114)
	FTE/Obl.	24	1,319	11		11		7		(4)	

* Through a Congressionally approved reprogramming, positions and funding for the Liquidation Division were transferred to EDA's Revolving Fund.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

	1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Loan programs:										
Liquidation............................FTE/Obl.	0	0	11	$638	11	$638	7	$475	(4)	($163)
Reimbursable Obligations..................FTE/Obl.	0	0	11	638	11	638	7	475	(4)	(163)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic Development Assistance Programs

Subactivity: Loan Programs

Goals and Objectives

Goals: Protect Federal investments in the EDA direct loan and loan guarantee portfolio.

Objectives: To monitor the closeout of loans and loan guarantees and to maximize timely collection of funds owed to the Federal Government.

Base Program

The Deputy Assistant Secretary for Loan Programs provides coordinated direction of headquarters and regional activities related to EDA's direct loan and loan guarantee programs and develops policies and procedures for the administration of Section 202 of the Public Works and Economic Development Act of 1965, as amended.

The Credit and Debt Management staff develops policies and procedures for the implementation of the loan guarantee program consistent with Administration objectives; directs and assists the regional offices in evaluating loan guarantee applications; reviews recommendations of the regional offices for new loan guarantees and prepares project recommendations for decision by the Assistant Secretary; serves as the internal control unit to analyze and recommend improvements to the organizational structure, staffing, policies, and procedures of the offices reporting to the Deputy Assistant Secretary for Loan Programs; coordinates and oversees the management improvement system regarding administration of the EDA business loan portfolio; and carries out special projects as assigned. The staff develops and implements loan/guarantee administration standards and procedures; oversees the servicing activities of the regional offices; conducts the loan administration of EDA loans/guarantees requiring servicing to sustain or restore EDA projects as viable operations, including modifications of existing loan/guarantee terms and conditions; analyzes and recommends for approval or denial modification actions to existing EDA loan/guarantee terms and conditions as requested by the regional offices; develops and implements loan/guarantee special servicing standards and procedures; performs, as requested by the Deputy Assistant Secretary for Loan Programs, reviews of loan/guarantee applications for projects; recommends expenditure of current funds for previously approved projects; conducts the post-approval administration of all EDA loans/guarantees within the headquarters portfolio that are determined to have the highest risk, greatest exposure or greatest programmatic sensitivity. Performs appropriate actions, such as restructuring, refinancing, obtaining new capital, or arranging for takeover by another organization when it is determined to be in the best interest of the government; and oversees post-approval management of revolving loan fund projects. This staff also handles grant and contract "debt" cases. Responsibility for billing for receivables is transferred from the Accounting Division if after 60 days no payment has been made. About 75 percent of the grant and contract debts are disputed.

The Liquidation staff conducts the orderly liquidation of EDA projects incapable of continuing viable operations to dispose of the project assets, acquired at foreclosure or otherwise, to the best advantage of the government; directs all liquidation activities concerning the care and protection of EDA's collateral and security position in EDA loans/guarantees; and requests the assistance of, and works with, EDA's Office of Chief Counsel and other Federal agencies toward the orderly liquidation of EDA loans/guarantees. Funding and staffing were transferred to EDA's Revolving Fund in FY 1990.

DECREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Loan Programs	Pos./BA	13	$761	4	$647	(9)	($114)
	FTE/Obl.	11		7		(4)	

The Administration proposes to terminate EDA beginning in FY 1991.

During FY 1991, this subactivity will monitor the closeout of loans. During FY 1990, EDA is proposing the sale of its Drought loan portfolio. Such sale is anticipated to generate some $55 million in receipts, all of which will be applied to the Administration's deficit reduction goal.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Development Assistance Programs
Subactivity: Loan Programs
Program Change: Phaseout of EDA Program

Object Class		1991 Increase/ (Decrease) Oblig.
11	Personnel compensation:	
11.1	Full-time permanent	($259)
11.5	Other personnel compensation	(4)
11.9	Total personnel compensation	(263)
12.1	Civilian personnel benefits	(38)
13	Benefits for former personnel	233
21	Travel and transportation of persons	(24)
22	Transportation of things	(3)
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	(4)
25	Other services	(13)
26	Supplies and materials	(2)
31	Equipment	0
99	TOTAL	(114)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Development Assistance Programs
Subactivity: Loan Programs
Program Change: Phaseout of EDA Program

Title:	Grade	Number	Annual Salary	Total Salaries
Deputy Assistant Secretary for Loan Programs	ES-3	1	$92,000	$92,000
Secretary	GS-8	1	25,300	25,300
Clerk-Typist	GS-5	1	16,900	16,900
Loan Specialist	GS-12	1	37,000	37,000
Supervisory Financial Analyst	GM-14	1	52,050	52,050
Financial Analyst	GS-13	1	50,400	50,400
Secretary	GS-6	1	18,800	18,800
Financial Analyst	GS-12	1	37,000	37,000
Financial Clerical Assistant	GS-5	1	16,900	16,900
Total		(9)		(346,350)
Plus FTE employment pre-Reduction-in-Force		5		87,350
Total full-time equivalent: Obligations		(4)		(259,000)

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(4)
Other than full-time permanent	0
Total	(4)

Authorized Positions:	
Full-time permanent	(9)
Other than full-time permanent	0
Total	(9)

1987

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Management Support:											
Deputy Assistant Secretary for Management Support	Pos./BA	4	$217	4	$288	4	$312	3	$208	(1)	($104)
	FTE/Obl.	4	208	4		4		3		(1)	
Budget	Pos./BA	4	3,532	4	3,940	4	4,081	2	3,362	(2)	(719)
	FTE/Obl.	4	3,378	4		4		3		(1)	
Accounting	Pos./BA	20	572	20	576	20	603	10	331	(10)	(272)
	FTE/Obl.	15	557	16		15		9		(6)	
Information Systems	Pos./BA	15	3,422	15	2,855	15	2,995	7	2,788	(8)	(207)
	FTE/Obl.	14	3,349	11		11		8		(3)	
Executive Secretariat	Pos./BA	4	151	4	134	4	152	2	126	(2)	(26)
	FTE/Obl.	4	180	4		4		3		(1)	
Compliance Review	Pos./BA	9	598	9	511	9	538	4	490	(5)	(48)
	FTE/Obl.	10	566	10		9		5		(4)	
Total	Pos./BA	56	8,492	56	8,304	56	8,681	28	7,305	(28)	(1,376)
	FTE/Obl.	51	8,238	49		47		31		(16)	

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Management Support:											
Accounting	FTE/Obl.	2	$67	2	$80	2	$80	2	$80	0	0
Information Systems	FTE/Obl.	0	74	0	74	0	74	0	80	0	$6
Total	FTE/Obl.	2	141	2	154	2	154	2	160	0	6

1989

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic Development Assistance Programs

Subactivity: Management Support

Goals and Objectives

Goals: To provide comprehensive budget, administrative and management support necessary to ensure an orderly phaseout of the agency within the resources appropriated.

Objectives: To provide support to all EDA components in the execution of their programs consistent with the intents of both the Administration and the Congress.

Base Program

The Deputy Assistant Secretary for Management Support serves as Internal Control Coordinator for EDA; is responsible for coordinating and evaluating internal management control systems; provides for the full range of support services, unless otherwise provided at the Departmental level for EDA headquarters and, as required, for the regional offices; evaluates, reports, and makes recommendations on the optimum use of staff, and physical assets by EDA; and serves as liaison with the Office of the Assistant Secretary for Administration on all administrative support matters.

The Budget staff develops and prepares the annual budgets for EDA. The Budget Officer is responsible for the total financial program of EDA and for the fiscal aspects of EDA programs entrusted to other Federal agencies; reviews and monitors a fiscal control system for both program and administrative expenses consistent with the requirements of the Anti-Deficiency Act, which shall include, but not be restricted to allotment of funds, operating budgets, employment limitations, and analyses of reports and resource proposals. The Budget Officer serves as the focal point on all resource issues associated with the Agency phaseout through FY 1991.

The Accounting staff develops and maintains accounting systems and prepares financial reports for internal and external use, according to the needs of management, the requirements of laws or regulations and established policies; provides accounting support for effective control of all funds administered to accurately present the status of the appropriated funds within the requirements of the Anti-Deficiency Act and as required by the program officials (specifically the Budget Officer); analyzes financial and operating data to ensure that financial and management policies are being followed; and serves as the liaison with the Office of the Secretary and other Federal Agencies in all accounting matters.

The Information Systems staff plans, develops, acquires, and coordinates the use of automatic data processing systems and equipment for EDA; provides data processing services, including the conduct of feasibility studies and the development of systems and programs for the application of automatic data processing techniques; develops and maintains a comprehensive information and data base system to meet specified requirements for budgetary, administrative, planning, operational, program management, and program evaluation purposes; and provides periodic and special summary reports on current operational trends and performance comparisons to planned goals.

The Executive Secretariat staff develops and conducts a program for the efficient management of all official records; develops and administers a report control system for all administrative and operational reports; receives all correspondence addressed to the Office of the Assistant Secretary, and assigns it to the appropriate office for action; records controlled and non-controlled correspondence, maintains prompt follow-up of replies to ensure that deadlines are met; maintains correspondence and policy files, and provides selective reference service to files as requested by EDA officials.

The Compliance Review staff conducts Section 702 studies, where appropriate; recommends areas for designation as economic development areas, as requested; coordinates all of EDA's environmental activities; develops, as appropriate, agency procedures for complying with environmental legislation, regulations, and executive orders; serves as EDA's official under the provisions of the National Environmental Policy Act of 1969 (NEPA): establishes effective systems throughout EDA to obtain and monitor reports regarding the program of equality of opportunity and ensures compliance with Civil Rights Guidelines, Department and EDA Regulations; establishes report requirements to ensure equality of opportunity by participants in economic development programs, conducts on-site inspections, and receives, investigates, and adjusts complaints; evaluates EDA experience regarding the equal opportunity program from a project activity viewpoint; and establishes uniform equal opportunity standards and procedures to be followed in reviewing EDA projects.

DECREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Management Support..	Pos./BA	56	$8,681	28	$7,305	(28)	($1,376)
	FTE/Obl.	47		31		(16)	

The Administration proposes to terminate EDA beginning in FY 1991.

During 1991, this subactivity will provide administrative and management support to all EDA components to ensure an orderly phaseout of the agency.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Development Assistance Programs
Subactivity: Management Support
Program Change: Phaseout of EDA Program

Object Class		1991 Increase/ (Decrease) Oblig.
11	Personnel compensation:	
11.1	Full-time permanent	($607)
11.3	Other than permanent	(117)
11.5	Other personnel compensation	(5)
11.9	Total personnel compensation	(729)
12.1	Civilian personnel benefits	(99)
13	Benefits for former personnel	203
21	Travel and transportation of persons	(15)
22	Transportation of things	9
23.1	Rental payments to GSA	(516)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	25
24	Printing and reproduction	(5)
25	Other services	65
26	Supplies and materials	(24)
31	Equipment	(290)
99	TOTAL	(1,376)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Development Assistance Programs
Subactivity: Management Support
Program Change: Phaseout of EDA Program

Title:	Grade	Number	Annual Salary	Total Salaries
Management Analyst	GS-12	2	$37,000	$74,000
Budget Analyst	GS-13	1	50,400	50,400
Budget Analyst	GS-12	1	37,000	37,000
Accounting Technician	GS-5	2	16,900	33,800
Accounting Technician	GS-6	1	18,800	18,800
Accountant	GS-9	1	25,500	25,500
Supervisory Systems Accountant	GM-14	1	52,050	52,050
Accounting Technician	GS-7	1	25,100	25,100
Accountant	GS-11	1	30,900	30,900
Systems Accountant	GS-12	1	37,000	37,000
Computer Programmer	GS-12	4	37,000	148,000
Computer Assistant	GS-7	1	25,100	25,100
Computer Specialist	GS-12	2	37,000	74,000
Computer Operator	GS-8	2	25,300	50,600
Correspondence Assistant	GS-7	2	25,100	50,200
Supervisory Environmental Protection Specialist	GM-14	1	52,050	52,050
Supervisory Equal Opportunity Specialist	GM-14	1	52,050	52,050
Equal Opportunity Specialist	GS-13	1	50,400	50,400
Secretary	GS-6	2	18,800	37,600
Total		(28)		(924,550)
Plus FTE employment pre-Reduction-in-Force		12		317,550
Total full-time equivalent: Obligations		(16)		(607,000)

Personnel Data	Number
Full-time Equivalent Employment:	
Full-time permanent	(14)
Other than full-time permanent	(2)
Total	(16)
Authorized Positions:	
Full-time permanent	(28)
Other than full-time permanent	0
Total	(28)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM AND PERFORMANCE
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Regional Operations:											
Philadelphia	Pos./BA	45	$2,488	46	$2,677	46	$2,808	19	$1,917	(27)	($891)
	FTE/Obl.	44	2,517	45		45		25		(20)	
Chicago	Pos./BA	35	1,578	35	1,962	35	2,061	14	1,229	(21)	(832)
	FTE/Obl.	33	1,757	34		34		18		(16)	
Seattle	Pos./BA	37	2,117	37	2,204	37	2,279	16	1,732	(21)	(547)
	FTE/Obl.	36	2,189	36		36		21		(15)	
Austin	Pos./BA	32	1,808	32	1,866	32	1,959	15	1,467	(17)	(492)
	FTE/Obl.	30	1,720	31		32		18		(14)	
Atlanta	Pos./BA	37	2,039	37	2,209	37	2,316	16	1,670	(21)	(646)
	FTE/Obl.	36	2,054	36		37		20		(17)	
Denver	Pos./BA	26	1,240	26	1,557	26	1,667	12	1,007	(14)	(660)
	FTE/Obl.	24	1,305	25		25		14		(11)	
Total	Pos./BA	213	11,270	213	12,475	213	13,090	92	9,022	(121)	(4,068)
	FTE/Obl.	203	11,542	207		209		116		(93)	

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Economic Development Assistance Programs

Subactivity: Regional Operations

Goals and Objectives

Goals: To coordinate at the local level the orderly phaseout of all economic development assistance grants and to protect Federal investments in the EDA direct loan and loan guarantee portfolio.

Objectives: To monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law.

Base Program

Regional operations include the six Regional Directors and their supporting technical, administrative and clerical personnel. The Regional Directors are responsible for the implementation of EDA's program within specific geographical areas and assist in the management of resources and the processing, monitoring and servicing of projects. Regional Counsels provide the legal services review required to execute and administer regional projects. The Public Works, Planning and Technical Assistance, Economic Adjustment and Loan Servicing staffs process applications for economic development assistance and monitor and service approved projects at the local level. Economic Development Representatives provide outreach and assistance at the local level.

DECREASE FOR 1991
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Personnel	Amount	Personnel	Amount	Personnel	Amount
Regional Operations..	Pos./BA	213	$13,090	92	$9,022	(121)	($4,068)
	FTE/Obl.	209		116		(93)	

The Administration proposes to terminate EDA beginning in FY 1991.

During FY 1991, any residual loan servicing activities will be transferred to Washington, D. C. All Economic Development Representatives will be released on or about November 30, 1990.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: Economic Development Assistance Programs
Subactivity: Regional Operations
Program Change: Phaseout of EDA Program

Object Class		1991 Increase/ (Decrease) Oblig.
11	Personnel compensation:	
11.1	Full-time permanent	($5,908)
11.5	Other personnel compensation	(3)
11.9	Total personnel compensation	(5,911)
12.1	Civilian personnel benefits	(1,136)
13	Benefits for former personnel	3,265
21	Travel and transportation of persons	(200)
22	Transportation of things	10
23.1	Rental payments to GSA	(373)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(85)
24	Printing and reproduction	(4)
25	Other services	380
26	Supplies and materials	(14)
31	Equipment	0
99	TOTAL	(4,068)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: Economic Development Assistance Programs
Subactivity: Regional Operations
Program Change: Phaseout of EDA Program

Title:	Grade	Number	Annual Salary	Total Salaries
Economic Development Representative	GS-14	5	$67,700	$338,500
Economic Development Representative	GS-13	44	57,300	2,521,200
Environmental Protection Specialist	GS-12	5	48,300	241,500
Equal Opportunity Specialist	GS-12	5	48,300	241,500
Attorney-Advisor	GS-11	1	30,900	30,900
Clerk-Typist	GS-4	3	19,060	57,180
Secretary	GS-5	6	20,250	121,500
Remote Terminal Operator	GS-7	2	26,450	52,900
Civil Engineer	GS-14	4	67,700	270,800
Program Mangement Specialist	GS-12	12	48,300	579,600
Supervisory Community Planner	GM-14	6	67,700	406,200
Community Planner	GS-12	7	43,300	303,100
Supervisory Loan Specialist	GM-14	3	67,900	203,700
Financial Analyst	GS-13	3	57,500	172,500
Computer Specialist	GS-12	2	45,700	91,400
Computer Assistant	GS-5	2	19,700	39,400
Financial Analyst	GS-12	4	48,000	192,000
Attorney-Advisor	GS-13	1	57,500	57,500
Community Planner	GS-11	2	36,500	73,000
Computer Operator	GS-9	1	27,200	27,200
Technical Assistance Specialist	GS-12	3	45,600	136,800
Total		(121)		(6,158,380)
Plus FTE employment pre-Reduction-in-Force		28		250,380
Total full-time equivalent: Obligations		(93)		(5,908,000)

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(93)
Other than full-time permanent	0
Total	(93)
Authorized Positions:	
Full-time permanent	(121)
Other than full-time permanent	0
Total	(121)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation:			
11.1	Full-time permanent	$15,285	$7,258	($8,027)
11.3	Other than full-time permanent	189	72	(117)
11.5	Other personnel compensation	145	126	(19)
11.9	Total personnel compensation	15,619	7,456	(8,163)
12.1	Civilian personnel benefits	2,979	1,499	(1,480)
13	Benefits for former personnel	0	4,226	4,226
21	Travel and transportation of persons	777	485	(292)
22	Transportation of things	34	46	12
23.1	Rental payments to GSA	2,138	1,249	(889)
23.2	Rental payments to others	2	2	0
23.3	Communications, utilities and miscellaneous charges	484	424	(60)
24	Printing and reproduction	72	25	(47)
25	Other services	4,116	4,542	426
26	Supplies and materials	94	46	(48)
31.0	Equipment	290	0	(290)
99	Subtotal Direct Obligations	26,605	20,000	(6,605)
	Reimbursable Obligations	792	635	(157)
	TOTAL OBLIGATIONS	27,397	20,635	(6,762)
Personnel Data				
Full-time Equivalent Employment:				
Full-time permanent		338	198	(140)
Other than full-time permanent		2	2	0
Total		340	200	(140)
Authorized Positions:				
Full-time permanent		358	158	(200)
Other than full-time permanent		2	2	0
Total		360	160	(200)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
DETAILED REQUIREMENTS BY OBJECT CLASS
(Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent:			
	Executive level	$99	$14	($85)
	Senior Executive Service (SES)	635	409	(226)
	General schedule	14,551	6,835	(7,716)
	Subtotal	15,285	7,258	(8,027)
11.3	Other than full-time permanent			
	General schedule (part-time permanent)	189	72	(117)
11.5	Other personnel compensation			
	Overtime	17	17	0
	SES performance awards	8	8	0
	Cash awards	58	50	(8)
	Merit pay awards	62	51	(11)
	Subtotal	145	126	(19)
11.9	Total personnel compensation	15,619	7,456	(8,163)
12.1	Civilian personnel benefits			
	Civil Service Retirement System	861	409	(452)
	Federal Employees' Retirement System	386	184	(202)
	Thrift Savings Plan (Basic Contribution)	30	14	(16)
	Thrift Savings Plan (Matching Contribution)	75	35	(40)
	OASDI	188	88	(100)
	Medicare	214	101	(113)
	Health insurance	834	321	(513)

Mr. SMITH. Here to testify in support of this request is the Acting Assistant Secretary for EDA, James Perry. Do you have a statement?

Mr. PERRY. Yes, Mr. Chairman. I believe we submitted an official written statement for the record, and I will be giving an abbreviated part of that statement.

Mr. SMITH. All right, please go ahead.

OPENING STATEMENT

Mr. PERRY. Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to present to you today the 1991 budget request for the Economic Development Administration and to highlight its 1989 and 1990 program operations. During my oral statement, I will be using rounded figures in most cases. More specific amounts are included in the written testimony that was submitted.

1989 FUNDING AVAILABILITY

For Fiscal Year 1989, EDA was appropriated $25 million in administrative funds, $150 million in loan guarantee authority, and $182 million in grant funds. The grant funds included 12 projects totaling $16 million that were identified in the appropriation language. Five of those 12 projects totaling $3 million were funded in Fiscal Year 1989 which resulted in a net discretionary grant program level of $179 million. Six of the remaining seven projects were mandated in the Fiscal Year 1990 appropriation and will be awarded this year.

1989 PUBLIC WORKS PROGRAM

EDA awarded 198 public works grants with total project costs of $290 million, of which the EDA investment was $124 million. The average EDA participation rate in those grants was 49 percent, which is the same as in Fiscal Year 1988, and a continuing improvement over the 55 percent in Fiscal Year 1987. The average grant amount in 1989 was $625,000, as compared to $604,000 in Fiscal Year 1988.

1989 ECONOMIC ADJUSTMENT PROGRAM

The Economic Adjustment Program funded 65 regular projects with a total EDA investment of $22 million. Of this amount, 19 grants established new revolving loan funds, nine grants recapitalized existing revolving loan funds, and 35 grants were awarded in response to sudden and severe economic dislocations. In addition, EDA provided $5 million to the Department of Labor to assist in the immediate cleanup efforts and short-term job dislocations resulting from the destruction caused by Hurricane Hugo last September.

1989 PLANNING PROGRAM

During Fiscal Year 1989, EDA's Planning Program provided 58 grants to Indian organizations, 282 grants to Economic Development Districts, and 38 grants to State and urban areas. These awards also included funding for eight new districts that had not been previously funded.

1989 TECHNICAL ASSISTANCE AND RESEARCH PROGRAMS

In the Technical Assistance Program, 122 grants valued at $6.8 million were awarded, including 11 new university centers which were funded with monies made available by the graduation program. EDA also funded 14 research projects in 1989.

LOAN GUARANTEES

Lastly, EDA awarded two loan guarantees in Fiscal Year 1989 with a face value of $3.1 million. This marked the first time in three years that EDA had awarded loan guarantees. I might note also that one loan guarantee has been awarded this Fiscal Year.

DEBT COLLECTION

The Office of Loan Programs collected $47 million of debt. Delinquencies were reduced $23 million, and now constitute $193 million, or 45 percent of the direct loan portfolio of $423 million.

FY 1990 FUNDING AVAILABILITY

For Fiscal Year 1990, EDA was appropriated $25.4 million in administrative funds, $150 million in loan guarantee authority, and $188.6 million in economic development grant funds. These amounts are net of the Gramm-Rudman-Hollings sequestration. As stated earlier, the appropriation language specifically mandates six projects for $11.2 million. In order to award these grants, EDA has requested that each of these six applicants submit a current application, which all have done. Final award of these projects will occur after review of these grant applications.

STATUS OF FY 1990 MANDATED PROJECTS

I would like now to make a brief discussion of these projects. It would be helpful here, as a departure from our written and prepared statement, in the interest of giving you an update on these projects.

Spindletop Development, which is in Beaumont, Texas, was recently approved. I believe it was approved in the last few days.

The University of Kentucky submitted their application in January. We expect that it will be approved within the next 7 to 10 days.

Des Moines, Iowa submitted their applicaton in early February. We also expect it will be approved in the next 7 to 10 days.

Seatech in New London, Connecticut was received in the latter part of February, and we expect it will be approved in the next 4 to 6 weeks.

Ankeny, Iowa was received in mid-February. We expect it will be approved in the next 4 to 6 weeks.

Marshall University, the technical assistance grant, has recently been received and it ought to be approved within the next 3 to 4 weeks.

Crownpoint, New Mexico, some of you might be familiar, that at the end of Fiscal Year 1989 we awarded an $83,000 technical assistance grant to Crownpoint to do a soil analysis, a hydrological survey of the site to try to determine the extent and the cause of the problems that they were having there in the drainage, whether it is a subsurface or an above-surface water problem. That engineering analysis should be completed by mid-April or late April.

Once they have that information in hand, they expect to be able to better determine the degree and extent of the problem and the nature of the problem, so that they can decide how best to solve it or determine exactly what it would take to resolve it. After they have that information, we will work with them to complete a grant application for whatever process they decide to follow from there.

They anticipate start of construction when the school year is out, which would be summertime; and this survey and soil analysis is in concert with their needs and efforts in trying to determine what the solution is, so we anticipate approval of that one. We don't have an application in hand exactly yet because it is waiting on the engineering survey, but the award will be made shortly after the study is complete.

FY 1990 PLANNING PROGRAM CRITERIA

The Planning Program, in full compliance with the language contained in the Fiscal Year 1990 Appropriation Act re-implementing EDA's Planning Grant Program, is consistent with past practice. The criteria used to determine the awards are those that are published in the Federal Register. They do not take into consideration the number of years a district has received a grant, or the geography or population of the district.

As in the past, the operative criteria are the responsiveness of the proposed work program to the program regulations, the economic distress of the area served by the applicant, the past performance of the currently funded grantee, the local leaders' involvement in the applicant's economic development activities, and the amount of local funding provided to match the Federal dollars.

The amount available in Fiscal Year 1989 for district and area planning grants was $15.3 million. In Fiscal Year 1990, the appropriation minus the sequester is $15.1 million, to which we are redirecting approximately $500,000 from other planning grant programs.

To date, 190 grants have been invited and 93 of those grants, the ones that had renewal dates of January 1, have been awarded. The April 1 and July 1 grants, the grants that start on those dates, should all be approved in a timely manner. A detailed list of those grant recipients was provided to your staff prior to this hearing.

HEADQUARTERS POLICY GROUP

One of the management initiatives undertaken recently is establishment of the Headquarters Policy Group, the HPG. The primary purpose of the HPG is to review and discuss agency-wide policy needs and issues, and to serve as a forum for the development and evaluation of agency policy in the areas of grants and business finance. A secondary purpose of HPG is to provide an early oversight policy review of proposed projects that are subject to final approval by the Assistant Secretary.

To ensure the success of HPG in the general operation of the agency, EDA held a major management conference involving the regional offices and headquarters management with the single purpose of improving all aspects of agency operations, particularly those that deal with application processes and post-approval monitoring actions. Specifically, we were discussing the need for complete and accurate documentation, improved responsiveness and timeliness, the elimination of duplicative efforts, streamlined procedures, establishment of quality standards, and improved pipeline management of all pending applications.

STATUS OF COMMUNITY DEVELOPMENT CORPORATIONS

As discussed in last year's hearing, EDA began last year a one-year outreach and pilot program to inform and assist local communities utilizing a little known private sector tool for economic development. This tool is the Bank Community Development Corporations, Bank CDCs, which are affiliates of commercial banks or bank holding companies that are allowed to make loans and equity investments for community or economic development.

The goal of the Bank CDC outreach program was to promote the use of Bank CDCs for economic development, to help five or six selected communities in a local pilot program to organize and implement their own Bank CDC programs, and to produce a how-to manual so that other banks in communities throughout the country can be aware of benefits from establishing a Bank CDC.

The results to date have been very encouraging. Six new Bank CDCs have been organized and approved, and four of them have already committed funding to their first ventures. Also, another three communities have their Bank CDC program organized and their applications are pending submission to the bank regulators for approval.

EDA has been very pleased with the results to date, and is proud of its own pump-priming efforts to promote this private sector economic development initiative. It should be noted that these CDCs are operating completely on private sector money. No EDA or other Federal funds are involved in the investments which allow these local leaders to utilize these tools as they feel are needed in the interest of their communities.

GRANT LEGISLATION

Improvement of grants management is also being legislatively proposed. The Department intends to resubmit a proposal to enhance the Secretary's authority to take action necessary to protect the Government's interest in property held in connection with the EDA grant programs.

In recent years, it has been found that many grant recipients have violated the terms of their grants by leasing or selling facilities that were acquired, built, or improved with grant funds, or have lost ownership of the facilities through foreclosure for failure to pay their debts. EDA has not been able to adequately recoup its grant funds or to undertake liquidation, foreclosure, or other necessary actions to protect its interest in properties acquired, built or improved with these EDA grant funds.

EDA's authorizing legislation and regulations provide for EDA to acquire property purchased or improved with EDA loans and loan guarantees, but not for property purchased or improved with grant funds, nor do they make provisions to protect and care for such EDA grant-financed properties.

FY 1991 PROGRAM PHASEOUT

Although EDA can list limited success in the area of economic development, the cost of maintaining this program cannot be justified in view of today's fiscal constraints and continuing economic prosperity. As such, we are proposing the phaseout of the Economic Development Administration.

This phaseout would be conducted over a 5-year period, beginning with the immediate elimination of all grant funding and loan guarantee authority. Administratively, we would require $20 million in Fiscal Year 1991 to fund 160 end-of-year positions. To attain this level of staffing, the Agency would release some 200 employees in the first quarter of Fiscal Year 1991.

This proposal is based on the premise that local economic development is more appropriately addressed at the local level. In addition, given the continuing Federal deficit, programs such as EDA are a lower priority use of the limited resources available.

CONCLUDING STATEMENT

Mr. Chairman, this concludes my prepared statement, but before we start questions I would like to introduce to the Committee some of the people that are here with me, since there are some new faces included in our witnesses that haven't been before this committee before. I will take a second to introduce them: Swift Tarbell, who is the DAS for Grant Programs; Joe Levine you have met before, the Chief Counsel; Ruth Kleinfeld, who is the Deputy Assistant Secretary-designate for Loan Programs; Jim Marx, who is the Chief of the Debt Management Division in Loan Programs; and of course Vince Goodman, Budget Officer, who has been here before.

This concludes my statement. My staff and I will address any questions you or the Members of the Subcommittee may have. Thank you.

[The statement of Mr. Perry follows:]

STATEMENT BY THE ACTING ASSISTANT SECRETARY OF COMMERCE FOR ECONOMIC DEVELOPMENT BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

MARCH 6, 1990

Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to present to you today the 1991 budget request for the Economic Development Administration (EDA) and to highlight 1989-1990 program operations.

FY 1989 PROGRAM OPERATIONS

For 1989, EDA was appropriated $24.7 million in administrative funds, $150.0 million in loan guarantee authority, and $182.0 million in grant funds. Of the latter amount, 12 projects valued at $16.2 million were identified in appropriation language. Of these, five projects totalling $2.9 million were funded, resulting in a net discretionary grant program level of $179.1 million. Six of the remaining seven projects were mandated in the FY 1990 appropriation and will be awarded in FY 1990. Availability of 1989 grant and loan guarantee funding and selection criteria were published in the Federal Register on January 17, 1989.

In the area of Public Works, EDA awarded 198 grants with total project costs of $290.6 million of which the EDA investment was $123.8 million. The average EDA participation rate was 49 percent which is the same as in FY 1988 and a continuing improvement over the 55 percent in FY 1987; the average grant amount was $625 thousand as compared to $604 thousand in FY 1988.

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
DETAILED REQUIREMENTS BY OBJECT CLASS
(Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
	Civilian personnel benefits (Cont'd)			
	Life insurance	$30	$15	($15)
	Employees' Compensation Fund	326	326	0
	Cost of Living Allowance (COLA)	35	6	(29)
	Subtotal	2,979	1,499	(1,480)
13	Benefits for former personnel			
	Severance pay	0	4,226	4,226
21	Travel and transportation of persons			
	Common carrier	316	245	(71)
	Per diem/actual expenses	257	160	(97)
	Privately-owned vehicles	114	71	(43)
	Commercially-rented vehicles	15	9	(6)
	Other	75	0	(75)
	Subtotal	777	485	(292)
22	Transportation of things	34	46	12
23.1	Rental payments to GSA	2,138	1,249	(889)
23.2	Rental payments to others	2	2	0
23.3	Communications, utilities and miscellaneous charges			
	Federal Telecommunications System	252	225	(27)
	Other telecommunications services	180	180	0
	Postal services by USPS	52	19	(33)
	Subtotal	484	424	(60)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration
DETAILED REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
24	Printing and reproduction			
	Envelopes	$8	$3	($5)
	Other (Payments to WCF)	64	22	(42)
	Subtotal	72	25	(47)
25	Other services			
	Training:			
	Office of Personnel Management	50	25	(25)
	Other	5	3	(2)
	Maintenance of equipment	32	24	(8)
	ADP services (NOAA)	1,300	0	(1,300)
	Payments to GA, WCF	1,100	3,895	2,795
	Other non-government contracts	873	420	(453)
	Other	756	175	(581)
	Subtotal	4,116	4,542	426
26	Supplies and materials			
	Office supplies	49	30	(19)
	ADP supplies	10	5	(5)
	GSA self-service store	35	11	(24)
	Subtotal	94	46	(48)
31	Equipment	290	0	(290)
99	Subtotal Direct Obligations	26,605	20,000	(6,605)
	Reimbursable Obligations	792	635	(157)
	TOTAL OBLIGATIONS	27,397	20,635	(6,762)

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration

AVERAGE GRADE AND SALARY

	1989 Actual	1990 Estimate	1991 Estimate
Average ES salary	$75,770	$77,525	$92,550
Average GS grade	11.11	11.11	10.62
Average GS salary	$40,670	$42,804	$36,551
Average salary of ungraded positions	0	0	0

Department of Commerce
Office of Grants and Loans Administration
Grants and Loans Administration

CONSULTING AND RELATED SERVICES
(Dollar amounts in thousands)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	$43	$75	0
Management and professional services	0	0	0
Special studies and analyses	0	0	0
Management and support services for research and development	0	0	0
Total obligations	43	75	0

Description of Services

Under the Compact of Free Association Act of 1985, EDA was given responsibility for working with the Republic of the Marshall Islands and the Federated States of Micronesia to promote economic development. This expansion of our role in the Pacific caused us to re-examine our relationships with other islands in that region with the goal of developing a coherent overall strategy for working in the Pacific. In addition, EDA will hire a consultant in FY 1990 to review and assist in determining the most effective approach to initiate in the sale of its Drought loan portfolio.

The Economic Adjustment program funded 65 regular projects with a total EDA investment of $22.2 million. Of these amounts, 19 grants for $7.0 million were used to establish new Revolving Loan Funds (RLFs); 9 grants for $3.9 million were used to recapitalize existing RLFs; and 35 grants for $11.3 million were awarded in response to Sudden and Severe Economic Dislocations. Of the latter, 18 projects for $752 thousand went for adjustment strategy grants and 17 projects for approximately $10.4 million were for implementation grants. In addition, EDA provided $5 million to the Department of Labor to assist in the immediate cleanup efforts and short-term job dislocations resulting from the destruction caused by Hurricane Hugo last September.

During FY 1989, EDA's Planning program provided 58 grants to Indian organizations, 282 grants to Economic Development Districts, and 38 grants to state and urban areas. This included funding for eight new districts not previously funded. These grants had a total value of $23.0 million. In the Technical Assistance program, 122 grants valued at $6.8 million were awarded including 11 new University Centers, which were funded with monies made available from the graduation program. EDA also funded 14 research projects totalling $1.0 million.

Lastly, EDA awarded two loan guarantees in FY 1989 with a face value of $3.1 million. This marked the first time in three years that EDA had awarded loan guarantees. I might note also that one loan guarantee has been awarded this fiscal year. In the area of debt collection, the Office of Loan Programs collected $46.9 million. Delinquencies were reduced $22.6 million and now constitute $192.8 million or 45 percent of the direct loan portfolio of $422.6 million.

FY 1990 PROGRAM OPERATIONS

For FY 1990, EDA was appropriated $25.4 million in administrative funds, $150.0 million in loan guarantee authority and $188.6 million in economic development grant funds. These amounts are all net of the Gramm-Rudman-Hollings sequestration. As stated earlier, the appropriation language specifically mandates six projects for $11.2 million. EDA has requested that each of these six applicants submit a current application; final award of these projects will occur after review of the grant applications. In fact, one of these six projects, Spindletop in Beaumont, Texas, has been approved already.

PLANNING PROGRAM

In full compliance with the language contained in the FY 1990 Appropriations Act, EDA's FY 1990 Planning Grant program is consistent with the 1990 Appropriations Act and past practice. The criteria used to determine the awards are those published in the Federal Register and do not take into consideration the number of years a district has received a grant, geography, or population. The operative criteria are:

- the responsiveness of the proposed work program to the program regulations;
- the economic distress of the area served by the applicant;
- the past performance of any currently funded grantee (e.g., timeliness in meeting paperwork requirements);
- the local leaders' involvement in applicants' economic development activities;
- the amount of local funding provided to match Federal dollars.

The amount available in FY 1989 for Planning Grants was $15.3 million. In FY 1990, the appropriation minus the sequester is $15.1 million. We are also redirecting $500,000 from Indian, State and Urban grants to fund the districts. To date, 96 grants have been invited. Of this total, 93 have been awarded. The remainder will go out in a timely manner. A detailed list of grant recipients has been provided to your staff.

HEADQUARTERS POLICY GROUP

One of the management initiatives undertaken in FY 1990 is the establishment of the Headquarters Policy Group (HPG). The primary purpose of the HPG is to review and discuss agencywide policy needs and issues, and to serve as a forum for the development and evaluation of Agency policy in the areas of grants and business finance. A secondary purpose of the HPG is to provide an early oversight policy review of proposed projects that are subject to final approval by the Assistant Secretary. To ensure the success of the HPG, EDA held a first-of-its-kind conference with the purpose of improving all aspects of agency operation, particularly that dealing with the application processes and post-approval monitoring actions. Improvements are defined as: 1) Complete and accurate documentation 2) Improved responsiveness and timeliness 3) Elimination of duplicative efforts 4) Streamlined procedures 5) Establishment of quality standards and 6) Improved "pipeline" management of pending applications.

BANK COMMUNITY DEVELOPMENT CORPORATION

Last year, EDA began a one-year, outreach and pilot program to inform and assist local communities to utilize a little known private sector tool for economic development. This tool is the Bank Community Development Corporations (CDCs). Bank CDCs are affiliates of commercial banks or bank holding companies. They are allowed to make loans and also equity investments in real estate and businesses for community or economic development. Under regulation by the Federal Reserve System or the Comptroller of the Currency, banks may set up for-profit CDCs to undertake activities such as industrial development, small-business investments, and commercial revitalization. The goals of the "Bank CDC Outreach Program" were 1) To promote the use of Bank CDCs for economic development and 2) To help 5-6 selected communities in a local pilot program to organize and implement their own Bank CDC programs. The results to date of our program are very encouraging.

The promotion part of the program was very successful as information packages on Bank CDCs were mailed in response to over 500 requests from communities including bankers, public officials, and economic development professionals. The local pilot program was also very successful. To date, six new Bank CDCs have been organized and approved, and four of them have already committed funding to their first ventures. Also, another three communities have their Bank CDC programs organized and their applications are pending submission to the bank regulators for approval.

EDA thinks that the variety of activities of the six approved Bank CDCs in its pilot program is evidence of the potential importance of Bank CDCs and that the use of Bank CDCs should spread dramatically. Each of the new Bank CDCs is very different and could be replicated in dozens of communities for important local economic development projects. The new Bank CDCs were used for a variety of small business equity financing including 'mezzanine' (venture capital) financing for fast growing firms, 'micro' loans (under $50,000) with equity features, subordinate 'incentive' loans to attract new firms to rural areas, and seed capital for downtown commercial revitalization projects. The program will continue through the rest of the year with the distribution of a 25-minute video entitled "Bank CDCs - Better Banks - Better Communities." We will also be distributing copies of a 25 page "How-to" manual entitled "Organizing Bank CDCs for Local Economic Development."

EDA is very pleased with the results to date and is proud of its own "pump-priming" efforts to get this new private sector economic development initiative underway. It should be noted that these CDC's are operating completely with private sector money. No EDA or other Federal funds are involved in their investments which allow these local leaders to utilize these tools as they feel are needed in the interests of their community.

CARE AND PRESERVATION/LIEN

Improvement of grants management is also being legislatively proposed. The Department intends to submit a proposal to enhance the Secretary's authority to take actions necessary to protect the Government's interest in property held in connection with the EDA grant programs.

In recent years, many grant recipients have violated the terms of their grants by leasing or selling facilities that were acquired, built or improved with grant funds, or have lost ownership of the facilities through foreclosure for failure to pay their debts. EDA has not been able to adequately recoup its grant funds, or to undertake liquidation, foreclosure or other necessary actions to protect its interests in properties acquired, built or improved by EDA grant funds.

In the past, EDA has attempted with little or no success to protect its interests by: 1) using grant conditions, and 2) recording covenants or, since 1986, liens. However, neither solution was adequate to discourage grant recipients from misusing facilities paid for with Federal dollars. Before EDA can effectively assert ownership rights in property, a statutory amendment would be needed to enable EDA to expend funds to protect and care for such property, including liquidation, litigation or any other necessary action.

EDA's authorizing legislation and regulations provide for EDA to acquire property purchased or improved with EDA loans and loan guarantees, but not for property purchased or improved with grant funds, nor do they make provision to protect and care for such EDA grant-financed properties.

PROPOSED FY 1991 TERMINATION

Although EDA can list limited success in the area of economic development, the cost of maintaining this program cannot be justified in view of today's fiscal constraints and continuing economic prosperity. As such, we are proposing the phaseout of the Economic Development Administration. This phaseout would be conducted over a five-year period beginning with the immediate elimination of all grant funding and loan guarantee authority. Administratively, we would require $20.0 million in FY 1991 to fund 160 end-of-year positions. To attain this level of staffing, the Agency would release some 200 employees during the first quarter of FY 1991. This proposal is based on the premise that local economic development is more appropriately addressed at the local level. In addition, given the continuing Federal deficit programs such as EDA are an unnecessary use of limited resources.

Mr. Chairman, that concludes my prepared statement. My staff and I will now address any questions you and the Members of the Subcommittee may have.

Thank you.

ANNUAL PROPOSAL TO TERMINATE EDA

Mr. SMITH. I will yield at this time to Mr. Alexander.

Mr. ALEXANDER. Thank you very much, Mr. Chairman.

It seems like we are hearing the same speech again. Since I have been a member of this committee, we have had a half dozen or so Administrators of EDA, Assistant Secretaries for Economic Development, and acting, and during this and the previous Presidential Administration it seems that what you want to do is to phase out or end the Economic Development Administration. Is that your perception of what your role is?

Mr. PERRY. That is one of the roles that I serve, yes, sir.

Mr. ALEXANDER. You know we are not going to let you do that.

Mr. PERRY. I would anticipate that that is not going to be the intent of the Congress.

Mr. ALEXANDER. It seems like we go through this over and over and over again. We have to do it every year. Why don't you just quit?

Mr. PERRY. Why don't I just quit?

Mr. ALEXANDER. Yes, why don't you just quit? I mean, if I had a job of terminating an administration, I think I would just quit and go on and find something else to do.

Mr. PERRY. Well, Mr. Alexander, when I came to EDA I knew that was my role in life, and so I understood that. The Administration's goal is to terminate EDA—and you asked if that is my role, and that is one of the roles—the other role I have, as long as EDA exists, is to administer it according to the law. That is the other role that I have.

MAINTAINING 49 ECONOMIC DEVELOPMENT REPRESENTATIVES (EDR)

Mr. ALEXANDER. Well, speaking of the law, in last year's law there is a provision under salaries and expenses, if I have the right one here, which states—and I quote, on page 7, under Economic Development Administration, under Title 1, Department of Commerce—it says, "Notwithstanding any provision of this act or any other law, funds appropriated in this paragraph shall be used to fill and maintain 49 permanent positions designated as Economic Development Representatives out of the total number of permanent positions funded in the salaries and expenses account of the Economic Development Administration for Fiscal Year 1990, and such positions shall be maintained in the various States within the approved organizational structure in place on December 1, 1987, and where possible with those employees who filled those positions on that date."

Speaking of fulfilling or following the law, what have you done in order to comply with this provision?

Mr. PERRY. Are you speaking specifically of the EDR position in Arkansas?

Mr. ALEXANDER. All of them. Arkansas is but one.

CURRENT EDR VACANCIES

Mr. PERRY. Arkansas is currently vacant. I think a couple have become vacant since I have been acting. Every time one has become vacant, we have tried to fill the position. We have advertised it. We have posted it with OPM and in the Regional Administrative Service Centers and tried to obtain a replacement.

Arkansas, Los Angeles, and maybe one other one in Florida, I think, became vacant within the last year.

EDR VACANCY IN THE STATE OF ARKANSAS

Mr. **Alexander**. Don't you have anybody in Arkansas who is qualified to be a EDR?

Mr. **Perry**. Yes, sir, we do. And I couldn't agree with you more with the problem of the Arkansas EDR. That position became vacant on March 3, 1989, I believe it was when Ms. Hough retired. EDA requested and filed the papers with the RASC and OPM to fill that position March 8, which was in the week immediately following her retirement.

OPM review requirements before advertising delayed posting the vacancy; I think they posted it on May 5. They closed the posting on May 26. We received a certification with the list of the qualified applicants from OPM. It was sent to us on August 15.

The regional office in Austin held interviews with 11 of the people that applied, and the job offer was issued on September 15. We made a selection on September 15. The selection that was made was a former EDR who the regional office felt would be able to step into the job and be able to hit the ground running, as they would say.

But during the course of attaining the prerequisite security clearances for that individual to allow entrance on duty, EDA received a letter, whereas he withdrew his application for the job on January 20. The regional office—on that date, well, actually beginning a week earlier, started working with the Regional Service Center and OPM to see if they could use the same certificate that had been issued before since this individual was going to withdraw his application.

They wouldn't allow us to do it. I personally called the OPM office in Colorado to try to talk them into letting us use that certificate. They wouldn't let us do it; so we are having to repeat the process of readvertising the position. The position is currently being readvertised and the closing date is March 16. We anticipate getting a certificate from OPM probably a month later. That is about the normal time they take, a month to a month and a half. Barring any unforeseen problems, a selection should occur in early summer.

I agree it takes too long. It is a frustrating process.

DELAYS IN THE FEDERAL HIRING SYSTEM

Mr. **Alexander**. Mr. Perry?

Mr. **Perry**. Sir?

Mr. **Alexander**. You are from Mississippi?

Mr. **Perry**. Yes, sir.

Mr. **Alexander**. I am from Arkansas.

Mr. **Perry**. Yes, sir.

Mr. **Alexander**. Now, what do we call what you just described to me?

Mr. **Perry**. I call it frustrating. I have been absolutely frustrated with the personnel process. I agree with you wholeheartedly.

Mr. **Alexander**. You know we don't buy that kind of song and dance where we come from.

Mr. **Perry**. Yes, sir.

Mr. **Alexander**. Now talk to me straight, will you?

Mr. **Perry**. Okay.

Mr. **Alexander**. Just give me some straight answers, because you know I haven't got time for all that kind of stuff. I got people who need to see me.

We are not going to let you go out of business. Now, why haven't you implemented this provision? Now, just talk to me straight, man to man.

Mr. **Perry**. I am talking to you as straight as I can, sir. I am frustrated, every time we try to fill a position, with how long it takes us to get a list of people who can do it. We can't, as you well know, hire somebody off the street and put them to work. I am not sure that would be appropriate even if we could.

But I don't think it ought to take us two months, as it did in this case, to get OPM to post a vacancy announcement for a position when it becomes vacant. I don't think it ought to take us three months to get a list of people from that posting to choose from. And I don't think it ought to take us four months to get a security clearance of an individual when we hire them. I find all of that very frustrating.

When we did, I felt like we ought to be able to go back and use that same certificate and hire from it. They would not allow us to do that. I have got to operate within the personnel rules. I am frustrated with the process, myself.

Mr. **Alexander**. In other words, it is coming from a higher level.

Mr. **Perry**. No. It is coming from somebody other than EDA or Commerce. It is coming from OPM.

Mr. **Alexander**. The last agency that I heard that had your kind of problem was the Department of Housing and Urban Development, and I just talked today with the man who is going to head the Special Prosecutor's office to investigate the possibility of prosecuting the former Secretary of Housing and Urban Development.

Now, I don't know that that kind of problem exists within the Economic Development Administration, but if it is so encumbered with the labyrinth of red tape which you have just described to me, it seems to me that it should be a prospect for a serious investigation. Because if you are so encumbered, there must be something wrong with the way that you are running your business.

Now, meanwhile I represent a poor district. Mississippi doesn't have any poor people down there. You don't have to worry about that, do you?

Mr. **Perry**. I don't know which one is leading, Mississippi or Arkansas.

Mr. **Alexander**. I have a poor district, and I have five counties with chronic unemployment. Those people out there are looking to you and me for help. We have an administration here, which is legally created by law. We spend $200 million?

Mr. **Perry**. Yes, sir.

Mr. **Alexander**. Two hundred million dollars. Now, why can't we do something constructive with that $200 million besides all this red tape that you have just described to me? I mean, seriously, why can't we do something constructive with it? I mean, why do we have to spend our time quibbling about hiring somebody out in Arkansas?

We got a job to do. And you have fooled around here and you hadn't done your job because of red tape and bureaucracy. Now, you know we don't want to beat you up, but we will, if that is what you want.

Mr. **Perry**. Let me assure you, Congressman, that that is not what I want.

Mr. **Alexander**. Well, then you had better get your act together.

Mr. **Perry**. Let me assure you that that is not what I want, but let me do say that we have done—in fact, early on, and I think Ms. Hough would verify this. When she told us—me, others—in December that she was going to retire, I asked if possibly she would do, as other people do, fill out the personnel form so that we could start the recruitment earlier

Mr. **Alexander**. Mr. Perry?

Mr. **Perry**. And I agreed with her when she didn't want to do it. But when we did——

Mr. **Alexander**. Mr. Perry?

Mr. **Perry**. Sir?

Mr. **Alexander**. I want you to get busy and fill that job out in Arkansas. I want somebody in that job that is qualified. I want to see some action out there in the next 30 days. That is what I want. And I want you to take the responsibility to see that that is done.

Mr. **Perry**. I will.

Mr. **Alexander**. Now you see that it is done because you know that I am going to be back to see you. Now, I am not playing.

Mr. **Perry**. I understand

Mr. **Alexander**. Otherwise, I think that you are just wasting taxpayers' money. Just totally wasting it. If I was you, I would quit.

Now, you are not the first one that sat in that chair I have suggested that to, and several of them have taken my advice. That is all I have to say, Mr. Chairman.

Mr. **Smith**. Mr. Early?

Mr. **Early**. If you would just list them. It really is very frustrating why someone would take so long. When you have got a list, why wasn't there a name for the position to be filled. You know, we just keep going. No matter who sits there, it seems to be just excuses on why it is not done. I mean, there has got to be some government where the bottom line is to resolve the thing.

I have no questions.

FY 1989 PROJECT COST AND PARTICIPATION RATE

Mr. **Smith**. These grants that have been made, do you have any statistics as to what percentage of the project cost ended up being paid by EDA?

Mr. **Perry**. What percentage of the project cost?

Mr. **Smith**. Yes.

Mr. **Perry**. In Public Works it was 49 percent of the total project cost.

Mr. **Smith**. Forty-nine percent of the cost of these projects that you were making——

Mr. **Perry**. Yes, sir. A million dollar project, we would have put $490,000, on average, into it.

Mr. **Smith**. Well, I guess project is not the right word, but as you are using the term "project," that was a project for preliminary help on a big project, wasn't it? It wasn't the total project?

Mr. **Perry**. It varies. In some cases, I am sure that is true and in some cases that is the total project cost. Sometimes our project may be part of an overall much bigger project. We might be doing the road for a——

Mr. **Smith**. It is start-up money in many cases.

Mr. **Perry**. Probably in a small number of cases. I don't know—if I can defer, if Mr. Tarbell knows offhand; if not, we could provide it for the record.

In some cases, we might be doing a road and the whole project is a road in an industrial park. In other cases, our project is the total thing. We might be building the building and planning part of the project.

I don't know if he has the number.

Mr. **Tarbell**. None of the specifics.

Mr. **Goodman**. As far as average project cost, it is $1.5 million, of which EDA was contributing $625,000.

Mr. **Smith**. And again that is using the term project as you just used it. It might be a road that is actually a part of a big project.

Mr. **Goodman**. Yes, sir.

TOTAL PROJECT COST

Mr. **Smith**. But you don't have anything, any statistics to show what percentage of the total objective is?

Mr. **Perry**. I don't think we have that statistic. I will check and see if we have it available. And I think in some cases, and I would—this is off the cuff—I would say in probably 20 to 25 percent of the projects that we do there might be more to the project than what we are designing. But I am not sure if that is even an accurate number.

But we will see if we have something available, and, if we do, we will submit it for the record.

Mr. **Smith**. Well, some years ago projects were a big percentage of a total project. I mean, when we had a $750 million program. But, in recent years it has been more in terms of helping with start-up costs or helping with parts of the project that help them help themselves make a bigger project, and so I just can't believe that those are a very big percentage now.

Mr. **Perry**. We are doing smaller projects than we used to do, and if you are talking about what the anticipated development that would occur because of it would be, we have that. But, as far as the total projects, I think as a general rule we are just doing smaller projects.

A lot of times we are doing a building, or we are going in now sometimes too, sir, and we are adding to a previous project. We might be expanding a sewage treatment plant for an industrial park that was done several years ago, and so our project sometimes now is an addition to something that already existed; and we are just expanding the capacity of it.

Mr. **Smith**. Well, the point is, really, that many more of these really are local projects. We are not talking about the Federal Government supplanting local governments in these projects. We are not making them Federal projects. They are still local projects.

Mr. **Perry**. Yes, sir.

SEQUESTRATION

Mr. **Smith**. How did you handle sequestration, across the board?

Mr. **Goodman**. Across the board; yes, sir.

FY 1991 REQUEST TO OMB

Mr. **Smith**. So the administration's policy is to phase out the agency. Was that your recommendation, too, to OMB?

Mr. **Goodman**. Our request to OMB was $20 million. Yes, sir.

Mr. **Smith**. Why did you happen to make a request like that? I don't think there is another agency in the whole government that made a request like that. Are you setting policy, or is the Administration setting policy?

Mr. **Perry**. It is a policy question, and I would say that, as part of the Administration, I don't know how I would separate whether I am setting policy or the Administration is setting policy. But it is a policy question.

Mr. **Smith**. Were you told by somebody to submit that kind of a budget?

Mr. **Perry**. No, sir. I don't think I have been told by somebody to submit it. I don't remember having been told.

Mr. **Smith**. It seems strange to me that you wouldn't submit a budget that reflected what you would need to carry on the same program and let them make the decision that instead of that ought to be phased out.

Mr. **Perry**. It is submitted as part of the overall budget, and it is a policy question.

Mr. **Smith**. Well, last October you started developing your budget. An agency will usually submit in the first round what you think the budget ought to be, what kind of a budget you ought to have to carry out your program another year. But at that point you didn't submit a budget like that, you submitted a $20 million budget?

Mr. **Perry**. Yes, sir.

Mr. **Smith**. Who do you submit that to first? To OMB or the Department? You go up through the Department?

Mr. **Perry**. I think it goes up through the Department. I will have to check, but I am pretty sure we submit it to the Department.

Mr. **Smith**. Yes.

Mr. **Goodman**. And the Department submits them to OMB.

Mr. **Smith**. And that is what you submitted to the Department?

Mr. **Perry**. Yes, sir.

Mr. **Smith**. And when do you do that?

Mr. **Perry**. On June 1, the Secretarial Submission is due.

Mr. **Smith**. June 1?

Mr. **Goodman**. Yes, sir.

Mr. **Smith**. Oh. Last June 1. Yes.

Mr. **Perry**. Preceding me by a month, if you would.

Mr. **Smith**. Yes. Well, I don't think we are doing anything productive here. We will go to the next item.

EDA BUDGET PROCESS

Mr. **Early**. Mr. Chairman?

Mr. **Smith**. Yes, Mr. Early?

Mr. **Early**. Don't all your divisions submit a budget to you? All the other agencies that I—At NIH, an Institute submits a budget to the Director. Don't all the people of the divisions under you submit budgets to you, and then you develop them into the main one?

Mr. **Perry**. No, sir. Number one, we are much smaller. And, number two, as a policy matter when we submit a budget to the Department and to OMB, it is just a recommendation stating that there is a better way to handle this, and a better way to handle this at the local level.

Mr. **Early**. You don't ask any of your subordinates for input regarding what you should recommend?

Mr. **Perry**. Yes, sir, a number of them do. They have an input into it.

Mr. **Early**. But, do you ask them?

Mr. **Perry**. Yes, sir.

Mr. **Early**. And the ones that were in the divisions that you phased out, did they tell you, "I don't want anything"? What did they tell you?

Mr. **Perry**. It would depend on which one of them you ask, I would imagine. At one time, when I was an underling, I was the other side and I made the recommendation too.

Mr. **Early**. Well, would you have made the recommendation when you were an underling to the captain?

Mr. **Perry**. Yes, sir.

Mr. **Early**. You would?

Mr. **Perry**. Yes, sir.

Mr. **Early**. And you say that they did do that to you this year because they didn't even make a suggestion?

Mr. **Perry**. Well, as a policy position at that point when we were putting together the request, the decision was that the better way to handle this was not, in light of the overall needs that this was not the way to do it and that the various and sundry other agencies that deal with these type things throughout the government, that ours was not the most efficient way and best way to deal with it.

So my suggestion at the time when this was put together last time, which would have been prior to June 1, and the discussion—and I am not sure it was a very direct request—but it was a discussion that was held, and consensus of discussion was that we ought to continue that same process.

Mr. **Early**. All the program managers under you, did or did not make reports?

Mr. **Perry**. I don't know that we asked the program managers. I don't know which level you are carrying it down to, but I am not sure that we asked at the level that would have been below me.

Mr. **Early**. Do you have any problems, really? When you make that type of a rule, the suggestion is that they don't know anything. You are not even asking them to provide input into what you propose for the next year. I mean, that would bother me. I would ask anyone that works for me, "What do you think we should try to do for next year." I think almost all the other agencies do that.

ADMINISTRATION OF EDA

Mr. **Alexander**. Mr. Perry, and everyone here in the room that represents EDA, I want all of you to know that my—you used the word "frustration"—is not directed at any of you personally. As far as I can tell, everyone here is sincere in their efforts to carry out the job that the taxpayers are paying you for.

But I must observe that the record of management, or mismanagement, of the administration over the last nine years is pitiful. Is just pitiful. Every taxpayer in America should be disgusted with the poor management, the mismanagement, the gross mismanagement, the lack of management, the duplication, the red tape, the inefficiency that is shown by the performance of the Economic Development Administration as a branch of the Department of Commerce.

It has been worse than some of the Department of Agriculture. We have all—privately we will sit back and we will, you know, make jokes about which had the worse administration, the F troop, if you will.

You have the opportunity in EDA to do something very constructive for the people of this country that want to work, if you would carry out the mandate in the law that created the Economic Development Administration. EDA has a wonderful record of creating private employment throughout the United States. You can go to my district and look as an example. I don't know of one bad investment you have made there. There may be one somewhere that I don't know about. But I don't know of a penny that is wasted there.

It strikes me as being counterproductive for us, grown men and women, to come here like this today and create this sort of issue that turns out to be so personal. But, it is not intended that way.

I would like to get on with the business of people and try to do something with this $200 million instead of just wasting it, carrying out another year without making any progress.

As far as I am concerned, Mr. Chairman, if we can't do something constructive, we ought to delete the entire amount from the budget.

Mr. **Smith**. Well, those are just wind-down costs that they are proposing—mustering out pay.

Mr. ALEXANDER. Yes. Well, we ought to let them just quit now. We don't need to do that. I mean, there is no need of dragging this out.

Mr. SMITH. I don't want to give in to them. [Laughter.]

Mr. ALEXANDER. Well, I tell you what. I could run it for a whole lot cheaper than that. What I am trying to say, Mr. Perry, is that I wish you would talk to whomever it is you are responsible to, I understand that you are accountable to people within the Department, just like I am accountable to my constituents.

I would like to make something constructive out of the Economic Development Administration. Save a whole lot of time and help a whole lot of people, and we have the opportunity to do that. Like the chairman said, we are not going to phase you out entirely. We might use the money differently. It could be used, maybe, to establish some administration out in the States and eliminate the Washington office.

But, go back to your offices and look forward to coming back in 30 days or so, and, hopefully, with some constructive recommendations so we can get to work and do the job that we were sent here to do.

CONFIRMATION OF NEW ASSISTANT SECRETARY

Mr. SMITH. When do you expect the Administrator to be approved, do you have any date on that?

Mr. PERRY. Not soon enough. [Laughter.]

Mr. SMITH. You need more time?

Mr. PERRY. No. I am pleased—I started, I meant to mention that in the testimony because it has come up, and I meant to mention it earlier. A hearing date has been set, as you know. Ms. Joyce Hampers from Massachusetts was nominated by the President in January, and last Friday the Senate set a hearing date for confirmation, on March the 27th or shortly thereafter. And believe me, sir, probably not as much as even people on your side of this table, I am looking forward to that date.

Mr. SMITH. Do you plan to stay on?

Mr. PERRY. Haven't had that discussion. I don't, you know—that hasn't been an issue that we have discussed. I intend to stay for a while. I don't intend to stay in Washington forever, so I don't know. I intend to go back to the good area down South, next door to Mr. Alexander's own state.

Mr. ALEXANDER. Okay. Thank you.

Mr. PERRY. Thank you, Mr. Chairman.

Mr. SMITH. Thank you for coming.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Neal Smith

Proposed Elimination of EDA

QUESTION:

You are again proposing to eliminate all program funding for EDA for FY 1991. Why should Congress approve this proposal this year when we have not approved similar proposals in the past?

ANSWER:

The Administration continues to maintain that the funding of economic development activities is most appropriate and effective at the state and local level. In addition:

- o Sustained economic development is contingent upon fiscal stability which can result from a reduced deficit.
- o Problems of economic instability are addressed most effectively by those closest to the problem.
- o The continuation of EDA will simply exacerbate an already critical budget situation. Elimination will save the taxpayers $1.2 billion through 1995.

Submission of Authorizing Legislation

QUESTION:

Instead of submitting unrealistic budget requests advocating the elimination of EDA, why doesn't the Administration submit an authorization request which would include proposed management improvements to provide for more efficient and effective administration of this program?

ANSWER:

The Administration does not believe that the Economic Development Administration is an appropriate vehicle to promote the goals of economic development, and no changes to its authorizing legislation would make it so. The Administration proposes termination of EDA for the following reasons:

- o It is our belief that sustained economic development is contingent upon the fiscal stability which can result from a reduced deficit;

- Problems of local economic stability are resolved more effectively when the responsibilities lie with those closest to the problem, businesses, private citizens' organizations, and State and local governments.

- The problem of the budget deficit is simply too great to consider continuation of programs for which there are reasonable alternatives; in the case of economic development, State and local capability provides that alternative;

- Real jobs are created by the private sector and the federal government should not substitute for private capital or attempt to manipulate investment by competing with the private financial markets;

- Terminating EDA will save over $1.2 billion through 1995.

Maintaining Program Grant Level

QUESTION:

Congress appropriated $188,556,000 for FY 1990. The justifications indicate that in order to maintain this program level in FY 1991 an additional $7,919,000 would have to be appropriated. How did you arrive at this adjustment?

ANSWER:

The additional $7.9 million is intended to offset inflation. Since EDA's program consists primarily of grants to State and local governments, the applicable state and local purchase deflator of four percent most appropriately reflects future prices. The deflator is provided to all Executive Branch agencies by the Office of Management and Budget.

EDA Participation Rate

QUESTION:

What was the average EDA participation rate in public works projects in 1989 and 1990, and what is your goal in this area for FY 1991 if the Congress should appropriate money to continue EDA?

ANSWER:

In FY 1989, EDA awarded 198 grants under the Public Works and Development Facilities program. The grant funds amounted to $123.8 million, ranging in size from $95,000 to $3,750,000, and, on average, represented 49 percent of the estimated cost of the project.

So far in FY 1990, 140 applications involving $95.0 million in grant funds have been invited. On average, the EDA share represents 40 percent of the estimated project costs. To date, the average rate of participation for grants awarded in FY 1990 has been 46.5 percent.

While we don't have a specific "goal in this area", we would expect the average rate of EDA participation to remain in the the same general area; as we shall continue to give priority to proposals that demonstrate strong state and local support as evidenced by adequate local share financing availability. Grant assistance requested to pay for more than 50 percent of the project costs shall be considered based on the relative needs of the area, the nature of the project to be assisted, and the amount of fair user charges or other revenues the project may reasonably be expected to generate.

Regional Planning Districts

QUESTION:

I understand that early this year the Assistant Secretary for Administration strongly recommended to you that the district and area planning grant program be implemented in the same manner as EDA administered that program in FY 1989 at the same level of funding less only the sequester amount. Are you following his instruction?

ANSWER:

EDA is implementing its FY 1990 District Planning Program consistent with the FY 1990 appropriation and last year's process using the following operative criteria:

- o responsiveness of the proposed work program to program regulations;
- o economic distress of the area served by the applicant;
- o past performance of currently funded applicants;

- o amount of local funding provided to match Federal dollars.

QUESTION:

Have you changed any of the criteria or policies for making these grants?

ANSWER:

No basic policy or criteria changes have been made in the implementation of the FY 1990 district and area planning grant program. Determination of individual grant levels have been made in accordance with the established methods and policies the Agency has used in previous years. Annual grant levels are routinely adjusted based on grantee performance, distress of the area being served, special area needs, and availability of program funds.

QUESTION:

How many of the grants for FY 1990 will be reduced below the 89 level minus sequestration? How many will be increased?

ANSWER:

In FY 1989, EDA funded 286 grantees under the district and area grant program and it is expected that the same number of grants will be made in FY 1990. This year, of the total number of grants anticipated to be awarded, 96 will be reduced, 69 will be increased and 121 will remain at the same level of funding awarded in FY 1989.

Graduation of Certain University Centers

QUESTION:

Please describe for the Committee your program of "Graduating" certain university centers.

ANSWER:

In February 1987, EDA announced several policy changes for the University Center Program. One of these changes imposed a seven-year limit on participation by colleges and universities in the Program. As part of that policy EDA agreed to phase out its funding to Centers which had already exceeded the seven-year limit over several years in order to give these Centers an opportunity to secure other resources to continue their economic development activities.

This policy change permits EDA to operate the University Center Program as a source of "seed money" to help colleges and universities establish outreach programs in economic development. Under this policy, EDA will provide a University Center with $100,000 during each of the first five years and $50,000 during the sixth and seventh years.

During FY 1989, EDA established six new University Centers and 11 in FY 1989.

QUESTION:

What is the authority for this policy -- is the policy prohibited by the language in the FY 1990 Appropriations Act which prohibits the Secretary of Commerce from promulgating or enforcing any new rule which was not in effect on December 22, 1987?

ANSWER:

EDA announced this policy change in the Federal Register on February 11, 1987. EDA believes it is in full compliance with the FY 1990 Appropriations Act because the policy change was published prior to December 22, 1987.

QUESTION:

What is the average grant for the centers that you will phase out and will these centers be able to replace this funding from other sources?

ANSWER:

During FY 1990, 28 Centers will receive reduced funding under the graduation policy. The grants for the 28 Centers will range from $75,000 to $41,000. The average FY 1990 grant amount for these Centers is $50,464.

EDA believes that the Centers which used their financial assistance under this program to develop a track record for providing quality services will be able to replace these funds from other sources. Possible sources of funding include State and local governments and private foundations. EDA expects that these Centers will also enter into cost-sharing agreements with their clients.

QUESTION:

How much money for new university centers will the graduation policy provide and how many new centers do you hope to fund with these funds?

ANSWER:

EDA established six new Centers in FY 1988 and 11 new Centers in FY 1989. The FY 1990 budget for the University Center program is $4,700,000 compared to $4,790,000 in FY 1989.

Continuation grants for existing Centers will require $4,413,000 and a Congressionally mandated project for Marshall University will require $197,000, leaving $90,000 available for one new Center during FY 1990. However, it is likely that some of the 11 new Centers established in FY 1989 (most of these new Centers received their initial grants in September 1989) will request no-cost, time extensions of their current grants into FY 1991.

In FY 1991, continuation grants for the existing Centers will require approximately $3,400,000, leaving $1,300,000 available to fund 13 new Centers. That estimate assumes a FY 1991 program budget of $4,700,000 and no Congressionally mandated projects.

Community Development Corporation

QUESTION:

What are your plans for expanding the community development corporation program?

ANSWER:

EDA's Bank Community Development Corporation (CDC) Outreach Program will conclude with distribution of the VHS video and a "How to Set Up a Bank CDC" Manual, which promotes the community development corporation program to bankers, public officials and economic development representatives nationwide. We are currently distributing 600 copies of the video entitled "Stronger Communities, Stronger Banks" and several hundred copies of the "How to" manual.

On April 22, in Washington, D. C., the National Council for Urban Economic Development (CUED) will hold a Bank CDC Forum that is co-sponsored by EDA. The Acting Assistant Secretary will be one of the principal speakers. After their conference, CUED will publish a study on the users of Bank CDCs for local economic development.

Personnel of the EDA who have worked extensively on the Bank CDC program will be available through 1990 to advise and counsel banks, local government officials and economic development practitioners on how the Bank CDC program can be used to improve economic development.

Administrative Requirements

QUESTION:

You are proposing to reduce EDA staff from 360 positions to 200 positions in FY 1991. How did you determine what level of positions would be adequate to administer the close out of the EDA program?

ANSWER:

As with previous presentations, employees responsible for initiating or coordinating new projects constitute the bulk of staff released during the first year of closeout. These would be primarily Economic Development Representatives, planners, technical assistance specialists and support staff. Congressional approval to terminate EDA is likely to also include repeal of the McDade Amendment. In addition to facilitating the disposition of outstanding loans, repeal would accelerate staff reductions in the finance area. Lastly, most headquarters support functions would be merged within the Department in the proposed Office of Grants and Loans Administration.

FY 1991 Base Budget

QUESTION:

If Congress does not approve the proposal to terminate EDA, what would be the amount required to continue administrative staffing at the current program level?

ANSWER:

The current or Base level administrative requirement for FY 1991 is 360 authorized positions and $26,605,000 in budget authority.

Questions Submitted by Congressman Bill Alexander

FY 1989-90 Planning District Grants

QUESTION:

Please provide for the record, the following information -- the name and geographic location of each planning and development district which has, or is expected, to receive Fiscal Year 1990 planning funds; the amount of Fiscal Year 1989 planning funding each received; and, the basis of the decision in each instance where FY 1990 planning funding that has been or is expected to be provided is less than the FY 1989 nominal dollars planning grant amount provided.

ANSWER:

Following is a listing of each Planning District receiving funding in Fiscal Years 1989 and FY 1990, the location by region by state, and the change in the level of funding:

EDA PLANNING DISTRICT GRANTS
FY 1989-90
(in thousands of dollars)

PHILADELPHIA REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
MA	MERRIMACK VALLEY RPC	$50	$50	0	N/A
MA	OLD COLONY PLANNING CN	50	45	-$5	1
MA	SOUTHEASTERN RP&EDD	60	57	-3	1
MD	TRI CNTY CNCL W MD	50	50	0	N/A
ME	ANDROSCOGGIN VALLEY RP	66	60	-6	1
ME	EASTERN MAINE DEV DIST	71	66	-5	1
ME	NORTH KENNEBEC RPC	45	50	5	N/A
ME	NORTHERN MAINE RPC	60	60	0	N/A
NH	NORTH COUNTRY COUNCIL	45	43	-2	1
NJ	SOUTHERN NEW JERSEY ED	48	48	0	N/A
NY	CAPITAL DISTRICT RPC	50	45	-5	1
NY	CENTRAL NEW YORK RPB	50	48	-2	1
NY	GENESSEE FINGER LAKES	63	60	-3	1
NY	HUDSON VALLEY EDD	50	45	-5	1
NY	LKS CHAMPLAIN GEORGE R	59	56	-3	1
NY	MOHAWK VALLEY EDD EXPO	70	66	-4	1
NY	SOUTHERN TIER CENTRAL	50	48	-2	1
NY	SOUTHERN TIER EAST	50	47	-3	1
NY	SOUTHERN TIER WEST	50	48	-2	1
PA	EDC OF NORTHEASTERN PA	64	60	-4	1
PA	FAYETTE CNTY OEDC	40	40	0	N/A
PA	NORTH CENTRAL PA PDC	50	50	0	N/A
PA	NORTHERN TIER RPDC	50	48	-2	1
PA	NORTHWEST PA RPDC	50	50	0	N/A

(in thousands of dollars)

ATLANTA REGION (Cont'd)

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
TN	SOUTHEAST TENNESSEE	$51	$50	-$1	1
TN	SOUTHWEST TENNESSEE	54	55	1	N/A
TN	UPPER CUMBERLAND	55	55	0	N/A
	TOTAL, ATLANTA	4,223	4,202	-21	

DENVER REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
CO	REGION 10 EDD COLORADO	$50	$50	0	N/A
CO	SAN LUIS VALLEY RD & P	55	60	$5	N/A
CO	SOUTHERN COLORADO EDD	60	60	0	N/A
IA	AREA XV REG PLNG COMM	55	55	0	N/A
IA	EAST CENTRAL IOWA IG A	50	50	0	N/A
IA	NW IOWA PDC	59	50	-9	1
IA	SIOUXLAND INTRSTATE MP	50	50	0	N/A
IA	SOUTHERN IOWA (XVI) R	50	50	0	N/A
IA	SOUTHERN IOWA COG, INC	60	58	-2	1
IA	UPPER EXPLORERLAND RPC	50	50	0	N/A
KS	GREAT PLAINS DEV. INC.	50	48	-2	1
KS	NORTH CENTRAL KANSAS R	50	50	0	N/A
KS	NORTHWEST KANSAS P&D C	50	50	0	N/A
KS	SOUTH CENTRAL KS EDD I	60	57	-3	1
KS	SOUTHEAST KANSAS RPC	50	50	0	N/A
MO	BOOTHEEL RPC & EDC	55	55	0	N/A
MO	GREEN HILLS RPC	50	48	-2	1
MO	LAKE OF THE OZARKS C/L	50	50	0	N/A
MO	MARK TWAIN REG ADVR CO	50	50	0	N/A
MO	MERAMEC RPC	60	60	0	N/A
MO	MO-KAN REGIONAL COUNCI	38	50	12	N/A
MO	NORTHEAST MISSOURI RPC	50	48	-2	1
MO	NORTHWEST MISSOURI RCG	50	50	0	N/A
MO	OZARK FOOTHILLS RPC	55	55	0	N/A
MO	SE MISSOURI RPC & EDC	60	58	-2	1
MO	SO CEN OZARK COG	55	55	0	N/A
MT	BEAR PAW DEV CORP/NO M	55	55	0	N/A
ND	LAKE AGASSIZ REG COUNC	55	52	-3	1
ND	LEWIS & CLARK 1805 RCD	55	55	0	N/A
ND	NORTH CENT PLAN COUN N	50	50	0	N/A
ND	ROOSEVELT-CUSTER RCD	50	50	0	N/A
ND	SOURIS BASIN PLNG COUN	50	50	0	N/A
ND	SOUTH CENTRAL DAKOTA R	50	48	-2	1
NE	NORTHEAST NEBRASKA EDD	50	50	0	N/A
NE	PANHANDLE RESOURCES CN	50	50	0	N/A
NE	RIVER COUNTRY EDD	50	48	-2	1
NE	WEST CENTRL NEBRASKA E	50	48	-2	1
SD	BLACK HILLS CNCL/LOC G	55	55	0	N/A
SD	FIRST DISTRICT A/L GOV	55	55	0	N/A
SD	NORTHEAST COUNCL OF GV	50	50	0	N/A

(in thousands of dollars)

PHILADELPHIA REGION (Cont'd)

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
PA	SEDA COG	$50	$48	-$2	1
PA	SOUTHERN ALLEGHENIES	50	50	0	N/A
PR	COMMONWEALTH OF P. R.	75	45	-30	2
VA	CENTRAL SHENANDOAH PDC	45	42	-3	1
VA	CRATER PDC	50	50	0	N/A
VA	CUMBERLAND PLATEAU PDC	50	50	0	N/A
VA	LENOWISCO PDC	58	60	2	N/A
VA	MOUNT ROGERS PDC	50	48	-2	1
VA	PIEDMONT PDC	50	50	0	N/A
VA	RADCO PDC	50	45	-5	1
VA	SOUTHSIDE PDC	54	52	-2	1
VA	SOUTHWEST VA CDF	45	50	5	N/A
VI	U.S. VIRGIN ISLANDS	145	45	-100	2
VT	EDC OF NORTHERN VT	50	50	0	N/A
VT	SO. VT. DEV. COUNCIL,	50	47	-3	1
WV	BCKP INTERGOV CNCL	55	55	0	N/A
WV	BEL-O-MAR REG COUNCIL	45	45	0	N/A
WV	BHJ METRO PL COM (REGX)	40	40	0	N/A
WV	EAST PANHDLE RPDC	50	50	0	N/A
WV	MID-OHIO VALLEY RPDC	50	55	5	N/A
WV	REGION 1 PDC	48	55	7	N/A
WV	REGION 4 PDC	50	55	5	N/A
WV	REGION 7 PDC	50	60	10	N/A
WV	REGION 8 PDC	55	55	0	N/A
WV	REGION II PDC	50	55	5	N/A
WV	REGION VI PDC	50	55	5	N/A
	TOTAL, PHILADELPHIA	2,706	2,552	-154	

ATLANTA REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
AL	TOMBIGBEEE REG COMM	$57	$60	$3	N/A
AL	EAST AL PL&DEV COMM	50	50	0	N/A
AL	N CENTRAL AL REG COMM	50	50	0	N/A
AL	S CENTRAL AL DEV COMM	60	58	-2	1
AL	SE AL REG P&DC	57	55	-2	1
AL	SOUTH ALABAMA RPC	50	50	0	N/A
AL	TOP OF ALABAMA REG COG	50	48	-2	1
AL	WEST ALABAMA EDD	50	50	0	N/A
FL	APALACHEE REG PLNG CNC	51	50	-1	1
FL	CENTRAL FL REG PLNG	50	50	0	N/A
FL	N CNTRL FL REG PLNG CN	51	50	-1	1
GA	ALTAMAHA GA SOU APDC	51	50	-1	1
GA	CHATTAHOOCHEE-FLINT AP	51	50	-1	1
GA	CNTRL SAVANNAH RIVR AP	60	58	-2	1
GA	COASTAL APDC	60	58	-2	1
GA	COOSA VALLEY APDC	51	50	-1	1
GA	GA MTNS APDC	60	58	-2	1

(in thousands of dollars)

ATLANTA REGION (Cont'd)

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
GA	HEART OF GA APDC	$54	$54	0	N/A
GA	LWR CHATTAHOOCHEE APDC	52	54	$2	N/A
GA	MCINTOSH TRAIL APDC	51	48	-3	1
GA	MIDDLE FLINT APDC	54	57	3	N/A
GA	MIDDLE GA APDC	51	48	-3	1
GA	N GA APDC	51	48	-3	1
GA	NE GA APDC	52	50	-2	1
GA	OCONEE APDC	54	52	-2	1
GA	SOUTH GA APDC	60	52	-8	1
GA	SOUTHEAST GA APDC	54	54	0	N/A
GA	SOUTHWEST GA APDC	54	50	-4	1
KY	KY DEPT LCL GOVT	675	727	52	N/A
MS	CENTRAL MS P&DD	57	60	3	N/A
MS	E CENTRAL P&DD	60	60	0	N/A
MS	GOLDEN TRIANGLE P&DD	50	55	5	N/A
MS	NORTH CENTRAL MS P&DD	57	58	1	N/A
MS	NORTH DELTA P&DD	58	60	2	N/A
MS	NORTHEAST MS P&DD	47	55	8	N/A
MS	SOUTH DELTA P&DD	60	60	0	N/A
MS	SOUTHERN MS P&DD	96	60	-36	3
MS	SW MS P&DD	60	60	0	N/A
MS	THREE RIVERS P&DD	50	50	0	N/A
NC	ALBERMARLE RP&DC	54	52	-2	1
NC	KERR-TAR REG COG	53	50	-3	1
NC	LAND OF SKY REG CNCL	50	48	-2	1
NC	MID-EAST COMMISSION	53	50	-3	1
NC	NEUSE RIVER COG	55	52	-3	1
NC	REGION D CNCL OF GOVTS	50	50	0	N/A
NC	SOUTHEASTERN NC EDD	52	50	-2	1
NC	SOUTHWESTERN NC EDD	50	50	0	N/A
SC	B-C-D REG PLNG COUNCIL	50	50	0	N/A
SC	CATAWBA REG PLNG CNCL	50	50	0	N/A
SC	CNTRL MIDLANDS REG PLN	48	48	0	N/A
SC	LOW COUNTRY COG	53	53	0	N/A
SC	LOWER SAVANNAH COG	54	54	0	N/A
SC	PEE DEE REGIONAL COG	54	54	0	N/A
SC	SANTEE-LYNCHES	54	54	0	N/A
SC	SC APPALACHIAN COG	48	48	0	N/A
SC	UPPER SAVANNAH COG	54	54	0	N/A
SC	WACCAMAW REG PLNG&DEV CN	54	55	1	N/A
TN	E TN DEV DIST	57	55	-2	1
TN	FIRST TN-VA DEV DIST	52	50	-2	1
TN	GTR NASHVILLE REG CNCL	60	55	-5	1
TN	M L KING BLVD COMM DEV	36	36	0	N/A
TN	MEMPHIS DELTA DEV DIST	50	50	0	N/A
TN	NW TN DEV DIST	51	52	1	N/A
TN	SOUTH CNTRL TENN DEV	55	55	0	N/A

(in thousands of dollars)

DENVER REGION (Cont'd)

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
SD	THIRD PLNG & DEV DISTR	$55	$55	0	N/A
UT	FIVE COUNTY UTAH EDD	50	52	$2	N/A
UT	MOUNTAINLAND EDD	50	48	-2	1
UT	SIX COUNTY EDD	50	50	0	N/A
UT	SOUTHEASTERN UTAH EDD	50	55	5	N/A
UT	UINTAH BASIN EDD	50	50	0	N/A
WY	LINCOLN-UINTA ASSN/GOV	40	50	10	N/A
	TOTAL, DENVER	2,442	2,443	1	

CHICAGO REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
IL	BI STATE METRO PLAN CO	$57	$52	-$5	1
IL	GREATER EGYPT RPC	60	60	0	N/A
IL	GREATER WABASH RPDC	46	55	9	N/A
IL	SO EASTERN RPDC	46	58	12	N/A
IL	SOUTHERN FIVE RPDC	55	55	0	N/A
IL	SOUTHWESTERN IL METRO	60	55	-5	1
IN	IND WEST CENT EDD INC	50	50	0	N/A
IN	INDIANA 15 RPC	55	55	0	N/A
IN	KANKAKEE-IROQUOIS RPC	42	50	8	N/A
IN	REGION 3A	50	48	-2	1
IN	RIVER HILLS RPC	46	46	0	N/A
IN	SOUTHEASTERN IN RPC	46	50	4	N/A
IN	SOUTHERN INDIANA DEV C	50	50	0	N/A
MI	CENTRAL UPPER PENINSUL	64	60	-4	1
MI	EAST CENTRAL PDRC	55	52	-3	1
MI	EASTERN UPPER PENINSUL	60	60	0	N/A
MI	NE MICH CNCL OF GOVTS	50	60	10	N/A
MI	S CENTRAL MI PLAN COMN	50	48	-2	1
MI	SOUTHWESTERN MI RPC	50	50	0	N/A
MI	TRI-CNTY REG PLG COMM	55	52	-3	1
MI	WEST MICHIGAN	51	50	-1	1
MI	WEST MICHIGAN SHORELIN	50	50	0	N/A
MI	WESTERN UPPER PENINSUL	64	60	-4	1
MN	ARROWHEAD REG DEV COMN	70	65	-5	1
MN	EAST CENTRAL MN RDC	50	50	0	N/A
MN	HEADWATERS REG DEV COM	54	52	-2	1
MN	MID-MINNESOTA DEV COM.	50	50	0	N/A
MN	NORTHWEST RDC	50	50	0	N/A
MN	REGION 5 REG DEV COMN	50	48	-2	1
MN	SOUTHWEST REG DEV COMN	50	48	-2	1
MN	UPPER MINN VALLEY RDC	50	50	0	N/A
OH	BUCKEYE HILLS RDD	59	55	-4	1
OH	NEFCO	55	52	-3	1
OH	OH MIDEASTERN GOVT ASS	55	55	0	N/A
OH	OHIO VALLEY REG DEV CO	55	55	0	N/A
WI	BAYLAKE REG PLAN COMN	50	50	0	N/A

(in thousands of dollars)

CHICAGO REGION (Cont'd)

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
WI	E CENTRAL WIS	$50	$48	-$2	1
WI	MISS RIVER RPC	50	48	-2	1
WI	NO CENTRAL REG PLAN CO	50	50	0	N/A
WI	NWEST REG PLAN COMN	53	50	-3	1
WI	SOUTHWESTERN WI RPC	46	45	-1	1
WI	WEST CENTRAL WIS RPC	50	48	-2	1
	TOTAL, CHICAGO	2,209	2,195	-14	

SEATTLE REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
AK	KENAI PENINSULA BOROUG	$60	$60	0	N/A
AK	NORTHWEST ARCTIC BOROU	70	60	-$10	4
AS	AMERICAN SAMOA, GOVT O	40	45	5	N/A
CA	CENT SIERRA EC DEV DIS	56	55	-1	1
CA	IMPERIAL, COUNTY OF	45	50	5	N/A
CA	SIERRA ECON DEV DISTRI	75	60	-15	4
CA	SUPERIOR CA DEV COUNCI	65	65	0	N/A
CA	TRI-COUNTY ECON DEV CO	70	65	-5	1
GU	GUAM, GOVT OF	44	45	1	N/A
HI	PACIFIC BASIN DEV CNCL	71	75	4	N/A
ID	CLEARWATER ECON DEV AS	65	60	-5	1
ID	EAST CENTRAL IDA P & D	61	58	-3	1
ID	IDA-ORE PLAN & DEV ASS	75	65	-10	4
ID	PANHANDLE AREA COUNCIL	62	60	-2	1
ID	REGION IV DEV ASSN INC	60	58	-2	1
ID	SE IDAHO COUNCIL,GOVT	63	60	-3	1
NV	WESTERN NV DEVEL DSTRC	87	50	-37	5
OR	CCD BUSINESS DEVEL COR	62	60	-2	1
OR	CENTRAL OREGON INTERGO	56	58	2	N/A
OR	EAST CENTRAL OREGON AS	60	60	0	N/A
OR	MID WILLAMETTE VALLEYC	48	48	0	N/A
OR	MID-COLUMBIA EDD	64	60	-4	1
OR	NE OREGON ECON DEV DIS	50	50	0	1
OR	OREGON DISTRICT 4 COG	91	65	-26	4
WA	BENTON-FRANKLIN GOV CO	58	55	-3	1
WA	BIG BEND COUNCIL & EDD	55	55	0	1
WA	CENTRAL PUGET SOUND ED	113	65	-48	4
WA	KITTITAS-YAKIMA RC & E	60	60	0	N/A
WA	PALOUSE ECON DEV COUNC	50	48	-2	1
WA	PENINSULA DEVEL ASSN	45	48	3	N/A
WA	TRICO ECON DEV DISTRIC	60	60	0	N/A
	TOTAL, SEATTLE	1,941	1,783	-158	

(in thousands of dollars)

AUSTIN REGION

ST	APPLICANT NAME	FY 89	FY 90	CHANGE	REASON
AR	CENTRAL ARKANSAS PDD	$55	$55	0	N/A
AR	EAST ARKANSAS P&DD	61	60	-$1	1
AR	NORTHWEST ARKANSAS EDD	59	58	-1	1
AR	SOUTHEAST ARKANSAS EDD	65	62	-3	1
AR	SOUTHWEST ARKANSAS P&D	60	60	0	N/A
AR	WEST CENTRAL ARKANSAS	65	62	-3	1
AR	WESTERN ARKANSAS PDD	60	58	-2	1
AR	WHITE RIVER P&DD	62	60	-2	1
LA	CAPITAL REG PLAN COMM	54	58	4	N/A
LA	COORDINATING & DEV. CO	57	60	3	N/A
LA	EVANGELINE EDD	56	60	4	N/A
LA	IMPERIAL CALCASIEU R P	50	55	5	N/A
LA	KISATCHIE-DELTA REG PD	54	55	1	N/A
LA	NORTH DELTA REG P&DD I	60	60	0	N/A
LA	SOUTH CENTRAL PLANNING	50	55	5	N/A
NM	EASTERN PLAINS COG	50	52	2	N/A
NM	MID RIO GRANDE COG	35	40	5	N/A
NM	NORTH CENTRAL NM EDD	60	60	0	N/A
NM	NORTHWEST NEW MEXICO C	87	55	-32	6
NM	SOUTHEASTERN NM EDD	57	58	1	N/A
NM	SOUTHWEST NM COG	45	50	5	N/A
OK	ASSOC SO CENT OK GOVT	58	55	-3	1
OK	C.O.E.D.D.	58	55	-3	1
OK	EASTERN OKLA DEV DIST	62	60	-2	1
OK	GRAND GATEWAY E.D. ASS	66	62	-4	1
OK	KIAMICHI EDD OF OKLA	60	60	0	N/A
OK	NO OKLA DEV ASSN	44	45	1	N/A
OK	SOUTHERN OKLA DEV ASSN	63	60	-3	1
OK	SOUTHWSTRN OKLA DEV AU	50	50	0	N/A
TX	ALAMO AREA COG	50	50	0	N/A
TX	BRAZOS VALLEY DEV CNSL	46	50	4	N/A
TX	CAPITAL AREA PLNG CNCL	50	47	-3	1
TX	CENTRAL TEXAS EDD	69	66	-3	1
TX	COASTAL BEND COG	47	55	8	N/A
TX	DEEP EAST TEXAS COG	50	55	5	N/A
TX	GULF COAST EDD, INC.	75	60	-15	4
TX	LOWER RIO GRANDE VAL D	60	60	0	N/A
TX	MIDDLE RIO GRANDE DEV	54	55	1	N/A
TX	NORTHEAST TEXAS EDD	58	60	2	N/A
TX	PANHANDLE REG PLG COMM	44	45	1	N/A
TX	SOUTH PLAINS ASSOC GOV	50	50	0	N/A
TX	SOUTH TEXAS DEVL CNSL	45	60	15	N/A
TX	TEXOMA COUNCIL OF GOVT	47	50	3	N/A
TX	WEST CENTRAL TEXAS EDD	88	50	-38	6
TX	WEST TEXAS ECON DEV DI	49	50	1	N/A
	TOTAL, AUSTIN	2,545	2,503	-42	
	TOTAL, EDA	16,066	15,678	-388	

1. Grant level adjusted based on economic distress of the area and grantee performance, after discussing each individual grantee with the regional offices as per established EDA procedures.

2. No change in base funding level; in FY 1989 grantee received a one-time supplemental grant to assist in the recovery from Hurricane Hugo.

3. Reduced by $36,000. Grant was increased to provide additional assistance to overcome the effects of Hurricane Camille. This assistance was not meant to be a permanent part of the base grant.

4. Previous funding for grantee was disproportionate to average funding for districts. The basis established in #1 above was used.

5. No change in the base funding level of the Economic Development District (EDD). Additional funding was being awarded to the district to provide services to Indian tribes in the area. The district is eligible to compete for funding for the provision of services to the Indian tribes.

6. FY 1989 base funding level for a 12-month period was $50,000. Grantee received an additional 9-month grant to adjust grant start date to correspond to EDA's funding cycle.

EDA's FY 1990 District and Area Planning Program was implemented consistent with the FY 1990 Appropriations Act and last year's process. In addition, EDA management is redirecting some $560 thousand from other grant programs for a program level of $15.7 million. The FY 1990 operative award criteria were:

- o responsiveness of the proposed work program to program regulations;
- o economic distress of the area served by the applicant;
- o past performance of currently funded applicants;
- o amount of local funding provided to match Federal dollars.

University Center Grant Funding

QUESTION:

A. Please list for the record by name, geographic location, and dollar amount by fiscal year, all entities which received university center funds in Fiscal Years 1987, 1988, and 1989 and which have or are expected to receive such funds in Fiscal Year 1990.

ANSWER:

Following is a listing by state showing actual University Center funding for the period FY 1987 through FY 1989 and projected funding for FY 1990:

FUNDS AWARDED TO INSTITUTIONS FOR BASIC
UNIVERSITY CENTER OPERATIONS
BETWEEN FY 1987 AND FY 1990
(in thousands of dollars)

STATE	SPONSORING INSTITUTE	1987	1988	1989	1990
AL	Auburn Univ. Auburn	$80	$73	$57	$45
AL	Univ. of Alabama Tuscaloosa	0	100	100	100
AK	Univ. of Alaska-Southeast Juneau	100	100	100	75
AZ	Univ. of Arizona	100	100	100	100
AR	Arkansas State Univ. State Univ.	0	0	100	100
CA	Univ. of Southern California Los Angeles	100	88	0	0
	California State Univ., Chico	100	100	100	100
	State Center Community College District, Fresno	0	0	100	100
CO	Univ. of Colorado Boulder	85	74	57	44

University Centers (Cont'd)

(in thousands of dollars)

STATE	SPONSORING INSTITUTE	1987	1988	1989	1990
CO	National Technological Univ., Ft. Collins	0	0	$100	$100
FL	Florida State Univ. Tallahassee	$80	$76	60	46
	Florida A&M Univ. Tallahassee	0	100	0	100
GA	Atlanta Univ. Atlanta (HBCU)	80	80	80	80
	Georgia Institute of Technology Atlanta	80	72	56	44
HI	Univ. of Hawaii Honolulu	148	201	220	220
ID	Boise State Univ., Boise	100	100	75	50
IL	Univ. of Illinois Chicago	100	92	72	56
	Western Illinois Univ., Macomb	0	0	97	100
IN	Indiana/Purdue Univ. Indianapolis	100	100	75	50
IA	Iowa State Univ. Ames	80	72	56	44
KS	Univ. of Kansas Kansas State Univ. Lawrence/Manhattan (Jointly operated Center)	0	100	100	100
KY	University of Kentucky Lexington	80	72	56	44
	Eastern Kentucky Univ., Richmond	0	0	100	100

University Centers (Cont'd)

(in thousands of dollars)

STATE	SPONSORING INSTITUTE	1987	1988	1989	1990
LA	Univ. of New Orleans New Orleans	$80	$65	$49	$41
	Xavier Univ. New Orleans	100	100	100	100
ME	Univ. of Southern Maine Portland	80	72	56	44
MD	Morgan State Univ. Baltimore (HBCU)	0	0	100	100
MA	Univ. of Massachusetts Amherst	80	68	52	42
MI	Univ. of Michigan Ann Arbor	100	88	68	54
	Michigan State Univ. East Lansing	100	100	100	100
MN	St. Cloud State Univ., St. Cloud	0	100	0	100
MS	Mississippi Valley State Univ., Itta Bena	100	100	100	100
	Univ. of Southern Mississippi Hattiesburg	0	0	100	100
	Mississippi State Univ., Mississippi State	0	0	100	100
	Mississippi R&D Center, Jackson	80	76	0	0
MO	Univ. of Missouri Columbia	80	72	56	44
MT	Montana State Univ., Bozeman	100	100	100	100

University Centers (Cont'd)

(in thousands of dollars)

STATE	SPONSORING INSTITUTE	1987	1988	1989	1990
NE	Univ. of Nebraska Lincoln	$100	$100	$100	$75
NH	Univ. of New Hampshire Manchester	80	76	60	46
NJ	Rutgers, The State Univ., Newark	80	76	60	46
NM	Univ. of New Mexico Albuquerque	80	69	53	43
NY	State Univ. of New York Plattsburgh	80	73	57	45
	Cornell Univ. Ithaca	0	0	100	100
NC	Western Carolina Univ., Cullowhee	80	71	55	43
ND	North Dakota State Fargo, ND	85	85	85	68
OH	Cleveland State Univ., Cleveland	100	100	100	75
OK	East Central University Ada, OK	80	68	0	0
OR	Eastern Oregon State College LaGrande	100	100	100	100
PA	State Univ. Univ. Park	100	92	72	56
PR	Univ. of Puerto Rico, Mayaquez	100	100	100	100
SC	Benedict College Columbia (HBCU)	0	100	100	100
SD	SD State Univ. Brookings	0	100	100	100

University Centers (Cont'd)

(in thousands of dollars)

STATE	SPONSORING INSTITUTE	1987	1988	1989	1990
TN	Memphis State Univ., Memphis	$80	$69	$53	$43
TX	Univ. of Texas San Antonia	85	74	57	45
	Univ. of Texas/ Permian Basin Odessa	0	100	100	100
	TX A&M Univ. College Station	0	0	100	100
VA	Hampton Univ. Hampton (HBCU)	100	100	100	100
	VA Polytechnic Institute and State Univ.	0	0	100	100
WA	WA State Univ. Pullman	100	90	70	55
WV	Marshall Univ. Huntington	100	100	75	50
WI	Univ. of WI-Stout Menominee	100	100	0	0

1. HBCUs (Historically Black Colleges and Universities) have been temporarily exempt from the seven-year limit on participation in the University Center Program. EDA does intend to issue a separate policy concerning the length of time individual HBCUs may participate in the University Center Program.

2. These figures reflect only EDA support for the basic operations of a University Center. They do not include incentive grants, which were also funded from the University Center Budget, or any Local Technical Assistance grants that University Centers received.

3. University Center Program funds were also used to fund three Congressionally mandated grants in FY 1987, 1988 and 1989 to the Center for International Trade Development at Oklahoma State University. This organization was not considered a University Center, and these funds are not reflected in the listing.

University Center Reductions

QUESTION:

B. For each of those recipients of university center grant funds identified in response to 3. A. above, which received less EDA university center grant funds in FY 1989 than in FY 1988, or have or are expected to receive less in FY 1990, and for which the reduction was not based on the requirements of sequestration and/or a quality of performance evaluation, please identify the amount of reduction and the basis for that reduction.

ANSWER:

Following is a listing of University Centers with declining award amounts during Fiscal Years 1989 and 1990. The listing also reflects the reason(s) for the reductions.

AMOUNTS BY WHICH UNIVERSITY CENTER (UC) GRANTS
WERE REDUCED FROM THE PREVIOUS FISCAL YEAR
(in thousands of dollars)

STATE	SPONSORING INSTITUTION	FY 88/89	FY 89/90	REASON
AL	Auburn Univ. Auburn	-$16	-$12	G
AK	Univ. of Alaska-Southeast Juneau	0	-25	G
CA	Univ. of Southern California Los Angeles	-88	0	G,W
CO	Univ. of Colorado Boulder	-17	-13	G
FL	Florida State Univ. Tallahassee	-16	-14	G
FL	Florida A&M Univ. Tallahassee	-100	0	E

(in thousands of dollars)

UC Reductions (Cont'd)

STATE	SPONSORING INSTITUTION	FY 88/89	FY 89/90	REASON
GA	Georgia Institute of Technology Atlanta	-$16	-$12	G
ID	Boise State Univ. Boise	-25	-25	G
IL	Univ. of Illinois Chicago	-20	-16	G
IN	Indiana/Purdue Univ. Indianapolis	-25	-25	G
IA	Iowa State Univ. Ames	-16	-12	G
KY	Univ. of Kentucky Lexington	-16	-12	G
LA	Univ. of New Orleans New Orleans	-16	-8	G
ME	Univ. of Southern Maine, Portland	-16	-12	G
MA	Univ. of Massachusetts Amherst	-16	-10	G
MI	Univ. of Michigan Ann Arbor	-20	-14	G
MN	St. Cloud State Univ., St. Cloud	-100	0	E
MI	Mississippi R&D Center, Jackson	-76	0	G,W
MO	Univ. of Missouri Columbia	-16	-12	G
NE	Univ. of Nebraska Lincoln	0	-25	G
NH	Univ. of New Hampshire Manchester	-16	-14	G

(in thousands of dollars)

UC Reductions (Cont'd)

STATE	SPONSORING INSTITUTION	FY 88/89	FY 89/90	REASON
NJ	Rutgers, The State Univ., Newark	-$16	-$14	G
NM	Univ. of New Mexico Albuquerque	-16	-10	G
NY	State Univ. of New York, Plattsburg	-16	-12	G
NC	Western Carolina Univ., Cullowhee	-16	-12	G
ND	North Dakota State Univ., Fargo	0	-17	G
OH	Cleveland State Univ., Cleveland	0	-25	G
OK	East Central Univ., Ada	-68	0	G,W
PA	PA State Univ. University Park	-20	-16	G
TN	Memphis State Univ. Memphis	-$16	-$10	G
TX	Univ. of Texas San Antonio	-17	-12	G
WA	Washington State Univ., Pullman	-20	-15	G
WV	Marshall Univ. Huntington	-25	-25	G
WI	Univ. of WI-Stout Menominee	-100	0	G,W

1. "G" indicates a reduction instituted as part of graduation program.
2. "W" indicates an institution has withdrawn from program.
3. "E" indicates institution requested a no-cost time extension into the next fiscal year.

1990 District and Area Grant Reductions

QUESTION:

It is my understanding that you have taken action to reduce the Fiscal Year 1990 planning grant funding for 111 planning and development districts by an amount exceeding the amount necessary to meet the sequestration imposed by Gramm-Rudman-Hollings. It is further my understanding that you have taken this action despite objections from Thomas J. Collamore, Assistant Secretary for Administration.

A. Have you taken such action, and, if so, what was the basis for this action in light of the restrictions contained in the EDA paragraphs of Public Law 101-162, the Fiscal Year 1990 appropriations law?

ANSWER:

The district and area grant program will remain essentially at the FY 1989 level less reductions necessary to cope with the Gramm-Rudman-Hollings sequestration. Of the 286 district and area grants expected to be awarded in FY 1990, 96 have been reduced from the level they received in FY 1989 to maintain the program near the FY 1990 appropriation. This was done after advising Departmental and Congressional staff members and is in full compliance with Public Law 101-162 and last year's process.

QUESTION:

B. Did you consult with the staffs of EDA's regional offices prior to making changes in the planning grants to planning and development districts? If not, why not?

ANSWER:

Planning grant levels to district and area grantees were determined in consultation with EDA's regional offices. Each individual grantee was discussed between the Headquarters staff and the regional office's staff, and their recommendations were taken into account prior to establishing individual funding levels.

QUESTION:

It has been alleged that you are making substantial policy changes in the economic development district programs for Fiscal Year 1990.

A. In view of the language contained in Public Law 101-162, what is your statutory authority for making such changes?

ANSWER:

No substantial changes have been made in the economic development district program in Fiscal Year 1990. The program is being implemented in full compliance with Public Law 101-162 and last year's process.

QUESTION:

B. Why has public notice of these changes not been given and why have you not consulted with the Congress and the grantees about these changes?

ANSWER:

No public notice has been given as there are no substantial changes intended or contemplated for the economic development district programs. However, the establishment of program funding levels to remain within the program appropriations and to cope with the Gramm-Rudman-Hollings sequestrations were discussed with Congressional staff on several occasions.

QUESTION:

C. If it is your position that the changes are simply the result of improved management, why has there been no opportunity for public review or comment before these new policies are implemented?

ANSWER:

There has been significant misunderstanding of EDA's programmatic objectives and actions taken by the Agency. The adjustments were made to individual grantee funding levels in FY 1990, as in prior years, to correspond to program management and not to policy or procedural changes. If EDA decides to propose major policy changes in the administration and implementation of the district and area program, we will fully comply with the procedures of public notices requesting review and comments as well as requesting the advice and consent of Congress.

Headquarters Policy Group

QUESTION:

You have established something you call a "Headquarters Policy Group" [HPG].

As I understand it, this HPG is organized in such a way as to exclude the Assistant Secretary for Economic Development, when that post is filled, from participation.

A. Why would the Assistant Secretary for Economic Development not need to participate in the activities of the HPG?

ANSWER:

The Assistant Secretary will not be a member of the Headquarters Policy Group, but by no means will he or she be "exclude(d) ... from participation." The Assistant Secretary will be represented by three Deputy Assistants, all of whom are members of the HPG. Also, the Assistant Secretary will receive copies of the HPG meeting agenda items.

The Assistant Secretary will attend any HPG meetings that are of particular interest. The HPG was established in such a way that it will not require the attendance of the Assistant Secretary in order to conduct business, much of which is often "housekeeping" details.

QUESTION:

B. What actions have you taken and are you taking to insure that the HPG review of project proposals submitted to EDA does not violate the provision of Public Law 101-162 relating to EDA funding which states:

> "...the Secretary of Commerce or his designees shall not promulgate or enforce any rule, regulation, or grant agreement provision affecting programs authorized by the Public Works and Economic Development Act of 1965, as amended, unless such rule, regulation, or provision is either required by statute or expressed as the explicit intent of the Congress or is in substantial conformity with those rules, regulations and provisions in effect prior to December 22, 1987."

ANSWER:

One of the purposes of the HPG is to insure that all project proposals and any proposed policy adjustment is in compliance with all rules, regulations and existing policy directives, including the provisions of P.L. 101-162.

TUESDAY, MARCH 6, 1990.

INTERNATIONAL TRADE ADMINISTRATION

WITNESSES

J. MICHAEL FARREN, UNDER SECRETARY FOR INTERNATIONAL TRADE

ROGER W. WALLACE, DEPUTY UNDER SECRETARY FOR INTERNATIONAL TRADE

ALAN NEUSCHATZ, DIRECTOR OF ADMINISTRATION

MITCHELL LUXENBERG, DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. We shall consider today the FY 1991 budget request for the International Trade Administration. The request is for $189,020,000. This amount is an increase of $10,161,000 above the appropriation for FY 1990.

We shall insert into the record at this point the budget justifications submitted in support of this request.

[The justifications follow:]

Department of Commerce
International Trade Administration
BUDGET ESTIMATES, FISCAL YEAR 1991
CONGRESSIONAL SUBMISSION
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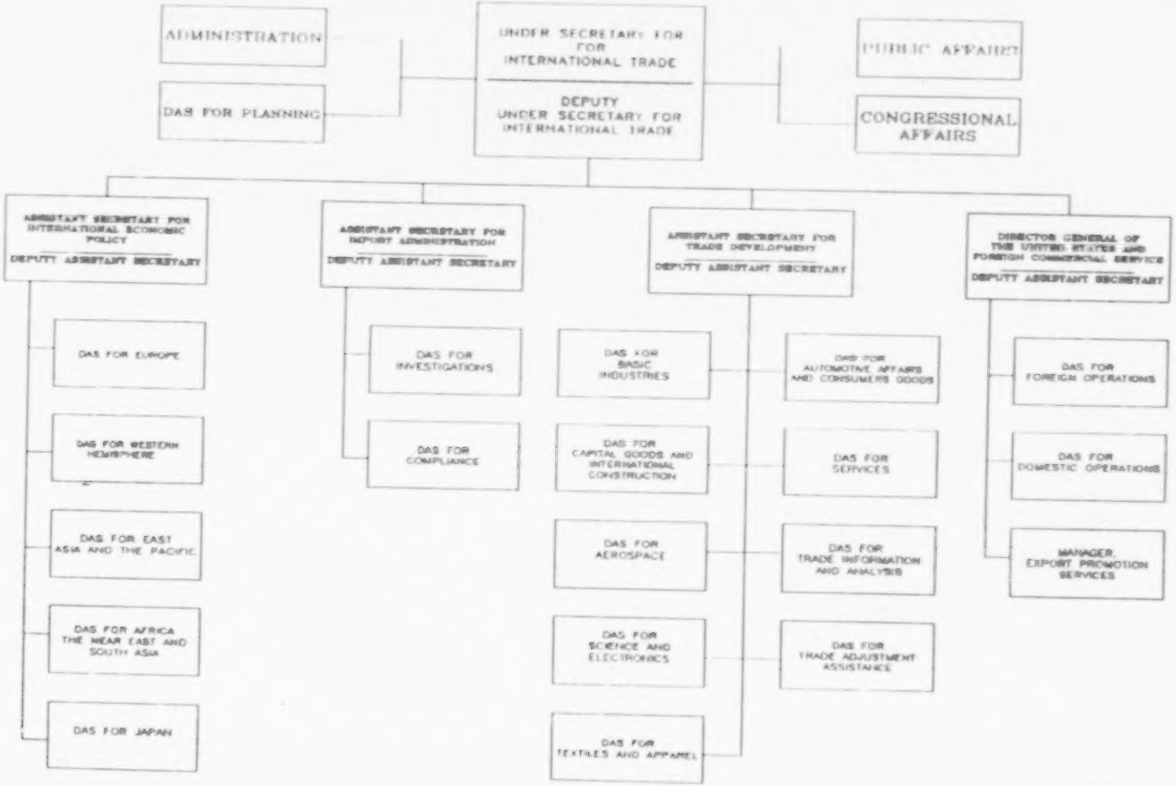
U.S. DEPARTMENT OF COMMERCE
INTERNATIONAL TRADE ADMINISTRATION


ADMINISTRATION
DAS FOR PLANNING
UNDER SECRETARY FOR INTERNATIONAL TRADE
DEPUTY UNDER SECRETARY FOR INTERNATIONAL TRADE
PUBLIC AFFAIRS
CONGRESSIONAL AFFAIRS
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
DEPUTY ASSISTANT SECRETARY
ASSISTANT SECRETARY FOR IMPORT ADMINISTRATION
DEPUTY ASSISTANT SECRETARY
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
DEPUTY ASSISTANT SECRETARY
DIRECTOR GENERAL OF THE UNITED STATES AND FOREIGN COMMERCIAL SERVICE
DEPUTY ASSISTANT SECRETARY
DAS FOR EUROPE
DAS FOR WESTERN HEMISPHERE
DAS FOR EAST ASIA AND THE PACIFIC
DAS FOR AFRICA THE NEAR EAST AND SOUTH ASIA
DAS FOR JAPAN
DAS FOR INVESTIGATIONS
DAS FOR COMPLIANCE
DAS FOR BASIC INDUSTRIES
DAS FOR AUTOMOTIVE AFFAIRS AND CONSUMERS GOODS
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ITA-1

GENERAL STATEMENT

In planning the International Trade Administration (ITA) FY 1991 budget request we confront rapidly changing conditions in world trade which make our primary mission, that of developing the export potential of U.S. firms in a manner consistent with foreign and economic policy, more challenging than ever. We determined that only with a unified, concerted effort among the four units of ITA could our mission be accomplished. We also identified the need to reallocate our District Office resources and improve the ability of District Offices to provide the services most useful for small-and medium-sized firms.

This request provides us the resources to conduct additional research and analysis on leading, new trade and economic issues. The analysis and information we generate are primary inputs into our policy development and implementation process. Through this process, we translate trade and economic data into concrete policy objectives.

Our research, analysis, and policy development efforts help us identify markets with high potential for export development. Through these activities, which involve direct contact with businesses, we hope to achieve the ultimate payoff from our research and policy work: increased American exports.

ITA's mission directly supports three major Department of Commerce goals:

o Increase America's competitiveness in the world economy;

o Safeguard the national interest through effective administration of U.S. trade laws; and

o Improve service delivery and internal management.

These goals will be accomplished through the activities outlined above, as carried out by our four line organizations: Trade Development; International Economic Policy; Import Administration; and the U.S. and Foreign Commercial Service.

Trade Development

The Trade Development program assesses the competitiveness of various U.S. industries, performs trade and investment analyses in support of industry programs and trade policy, and conducts export promotion programs directed toward industry sectors.

International Economic Policy

This program develops regional and multilateral economic policies; provides marketing services directly and through the Foreign Commercial Service which assist U.S. business in expanding exports; identifies long-range trade and investment problems; and develops remedial strategies.

Import Administration

The Import Administration program protects American industry from injurious and unfair trade practices by administering efficiently, fairly, and in a manner consistent with U.S. international obligations, the Antidumping and Countervailing Duty (AD/CVD) laws of the United States; the U.S.-European Economic Community Arrangements and 19 other steel trade arrangements under the President's program for the steel industry; and the machine tool arrangement with Japan and Taiwan under the President's Machine Tool Program.

U.S. and Foreign Commercial Service

The U.S. and Foreign Commercial Service counsels U.S. business on exporting through 47 district offices in the United States and diplomatic and consular posts in all significant trading countries. The program's goals are: to increase the number of U.S. firms that export and the number of foreign markets to which they export; provide export market information; promote and facilitate participation of U.S. firms in trade shows; and encourage and sponsor additional involvement by private, state and local organizations.

MAJOR EXTERNAL CONDITIONS AND TRENDS

Conditions:

The overall environment in which ITA's FY 1991 request was developed can be characterized as one of continuing trade frictions. The economic factors accounting for weak U.S. performance in foreign markets will persist in large degree through the budget planning period. These factors include uncertainty caused by volatile exchange rates, erosion of U.S. competitiveness in key industrial sectors, and unfair trading practices by some foreign trading partners. Additionally, the level of economic growth in traditional markets may be slack, Japan will continue its push into major markets with high-quality products, the Newly Industrialized Economies (NIEs) of East Asia will move into the production of increasingly sophisticated products, and significant external debt problems will hold down U.S. sales to traditional Latin American markets. Moreover, the low American savings rate results in reduced investment in plant and equipment, a large influx of foreign capital, and big trade and current account deficits. Conversely, high saving in Japan and other Pacific Rim countries finances high domestic investment, large outflows of capital, and big trade and current account surpluses.

Trends:

Advocates of market solutions are winning significant victories worldwide. Both developing and developed countries have privatized many state enterprises and deregulated some private activity. Developed countries have cut income tax rates to increase private incentive. Less developed countries (LDCs) now generally regard a market system as the best engine for economic development; collectivist solutions in vogue as recently as the 1970s are discredited.

If changes in world conditions can free substantial resources from defense use, this would permit a relatively painless reduction of the government budget deficit. However, as a result, the shared global mission between old allies and the United States could erode and stresses could develop that would threaten today's competitive economic system. Pressures for protection against imports, barriers to direct foreign investment, and nationalistic trade and industrial policies already are strong in the United States. Similar pressures are strong in many other countries too.

Our export expansion objectives must be pursued in light of these anticipated international economic trends and domestic political pressures. It is likely that the more significant trade issues facing the U.S. today will persist through the next decade. U.S. trade development efforts must continue to take account of these factors.

We believe that the program mix contained in our 1991 request is responsive to this anticipated international economic environment.

FY 1991 ITA BUDGET REQUEST

Most of ITA is funded through the Operations and Administration appropriation to which the balance of this document is addressed. Other ITA activities such as U.S. business participation in trade fairs and the sale of information products are funded through the ITA reimbursable program.

The FY 1991 budget request for ITA's Operations and Administration appropriation is $189.0 million and 2,577 positions, an increase of almost $10.2 million and 131 positions over the $178.9 million and 2,446 positions from FY 1990. The following is a comparison of the FY 1990 appropriation with 1991 estimates and related data on current employment:

(Dollar amounts in thousands)

	Appropriation Currently Available		1991 Estimate		Increase or (Decrease)		Permanent Employment as of 11/30
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Operations and Administration	2,446	178,859	2,577	189,020	131	10,161	2,039

SUMMARY OF PROPOSED BUDGET INCREASES

The unified approach we have taken in developing our FY 1991 budget request has allowed us to clearly see our needs within the overall context of the ITA mission. We have determined that in order to better carry out our current activities and prepare the path for these additional proposals, certain "tools" must be put in place. Among these "tools" are increased levels of foreign staffing and relocation of domestic staffing in the US&FCS, increased funding for CIMS and the National Trade Data Bank activities, overseas security, training, and office automation. With these "tools" in place we will be able to achieve our goals in research and analysis, policy development and implementation, export development, and trade law enforcement.

Our budget increase requests include:

- Foreign Staffing (US&FCS - 107 positions, $7,912,000) - This increase will improve our ability to service clients overseas, restore staff coverage lost due to past budget reductions and currency losses, allow for training of our new staff, increase our overseas presence to a level approaching equivalence to those maintained by competitor nations and increase the number of important markets where we can actively carve out positions for the increasing number of small and medium exporters. Included in this increase are specific initiatives in addition to the general reestablishment of our overseas strength. Some of these initiatives are: augmentation of staffing at EC Brussels and our London office to support efforts related to the European Community's establishment of a single internal market (about $1 million); enhanced support for Canada Free Trade Agreement activities (about $625 thousand); improved coverage of intellectual property rights protection issues in Brazil and other countries (working in concert with other ITA units-about $625 thousand); and a stronger outreach program in the Pacific Rim Countries, where current understaffing is a major problem (about $1.25 million).

o Security (US&FCS - 0 positions, $850,000) - This increase would be used for three important areas of overseas security: armored cars and skilled drivers, residential security, and local guard forces. The latter two activities were formerly provided by the Department of State, while the armored cars would provide protection for our employees similar to that provided for employees of other agencies. Unfortunately, safety and security risks are real and ITA employees should not be expected to face these real dangers without the minimal protections afforded by this increase. Our proposed increase in overseas personnel makes this increase all the more important.

o CIMS/NTDB (US&FCS - 0 positions, $850,000) - This increase will allow the US&FCS to maintain basic CIMS operations while ITA undertakes its technical and strategic reviews to determine the proper role of CIMS in the NTDB. In addition, the increase would fund the purchase of a new CIMS Central Processing Unit. It would also fund associated software purchases and allow US&FCS to convert CIMS data for use in the NTDB.

o Steel Program (IA - 8 positions, $484,000) - There are two driving forces behind the need for this increase. First, the President desires to reach an international consensus on steel trade and, second, in the interim the VRA program has been extended. IA's support for USTR's Uruguay Round negotiators, and contact with interested firms will increase as each of these driving forces moves forward.

o EC 1992 (IEP - 0 positions, $154,000) - The changing competitive situation in the European Economic Community will require a strong effort to assist U.S. firms in taking advantage of new opportunities which will arise. We will also be required to supply information on which to base policy decisions when inevitable disagreements over market access arise between the U.S. and the EC.

o Domestic Staffing Relocation (US&FCS - 0 positions, $570,000) - We know there are more exporters than ever (90,000), but still less than one in five manufacturers and wholesalers is involved in exporting. Our current domestic office alignment does not maximize our account executives' exposure to firms with the greatest export potential. This increase will allow us to reallocate 19 FTE geographically to offices with the greatest need based on export potential.

o International Economic Data System (IEDS)/NTDB (TD - 1 position, $130,000) - In order to implement our portion of IEDS as required in the Trade Act of 1988, we need these resources to develop the software which will allow analyst access to the system.

o Economic Restructuring in Eastern Europe and USSR (IEP - 0 positions, $100,000) - Economic reform in the Soviet Union and Eastern Europe is rapidly proceeding; the region is becoming increasingly market oriented. The West Europeans and Japanese are heavily funding trade promotion in the area and this increase would allow us to better compete by greatly expanding information publications about these potential markets and increasing direct staff knowledge of these countries.

- Expand AD/CVD Compliance (IA - 24 positions, $1,287,000) - This increase will enable Compliance and the Central Records Unit/Foreign Subsidy Library to process its significantly increased administrative caseload in a timely manner and meet statutorily mandated deadlines.

- Implement Provisions of the Trade Act of 1988 Related to Antidumping and Countervailing Duty Laws (IA - 15 positions, $900,000) - All Import Administration's (IA) offices involved in the administration of the unfair trade statutes are affected by the 1988 Trade Act (Act). Although the Act came into force in FY 1989, IA's resource needs arising from the Act have never been addressed. Furthermore, the effects of the Act are cumulative, e.g., some provisions first applied in one investigation or review will be applied in all future reviews of that case. As of the end of FY 1989, Import Administration was conducting 288, administrative reviews and 24 investigations in antidumping and countervailing duty proceedings.

- Foreign Trade Zones and Subzones (IA - 4 positions, $160,000) - Additional resources are needed to upgrade the staff's capability for in-depth economic analysis of Foreign Trade Zone (FTZ) proposals and monitoring FTZ activity.

SUMMARY OF PROPOSED BUDGET DECREASES

- Eliminate Trade Adjustment Assistance (TD - 11 positions, $4,543,000) - The Administration proposes to eliminate this program in 1991. Program termination is feasible because U.S. trade laws provide adequate remedies against unfair import competition. Firms harmed by imports should not be entitled to additional special government assistance.

- Canada FTA Secretariat (IEP - 0 positions, $40,000) - Last year Congress provided $500 thousand for Chapter 18 panels under the U.S.-Canada Free Trade Agreement. This decrease reflects a more accurate estimate of FY 1991 needs.

- GATT Uruguay Round (TD - 5 positions, $314,000; IEP - 10 positions, $541,000; IA - 1 position, $38,000; US&FCS - 1 position, $57,000) - This decrease applies to each of our program units and is directly related to the planned completion of the Uruguay Round of GATT in 1990. While many GATT related activities will continue, those can be carried out by our remaining staff with no relevant areas uncovered.

Department of Commerce
International Trade Administration
Operations and Administration
SUMMARY OF RESOURCE REQUIREMENTS
(Dollar amounts in thousands)

Page No.			Pers.	Amount	Pers.	Amount
	Appropriation Enacted, 1990	Pos./BA			2,446	181,296
		FTE/Obl.			2,303	188,506
	Sequester applied, 1990	Pos./BA				(2,437)
	Appropriation currently available	Pos./BA			2,446	178,859
		FTE/Obl.			2,303	186,069
ITA-15	FY 1991 Adjustments to base:					
	Adjustment for 1990 pay increase and related costs	Pos./BA	0	2,943		
		FTE/Obl.	0	2,943		
	Other cost changes	Pos./BA	0	(646)		
		FTE/Obl.	28	(7,856)		
	Subtotal, adjustments to base	Pos./BA			0	2,297
		FTE/Obl.			28	(4,913)
	1991 Base	Pos./BA			2,446	181,156
		FTE/Obl.			2,331	181,156

Comparison by Activity			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
			Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
International Trade												
ITA-31	Trade Development	Pos./BA	464	47,819	551	46,304	551	42,013	536	37,286	(15)	(4,727)
		FTE/Obl.	498	49,305	520	49,000	525		510		(15)	
ITA-55	International Economic Policy	Pos./BA	224	16,320	267	16,983	267	18,000	257	17,673	(10)	(327)
		FTE/Obl.	236	17,416	254	17,630	259		249		(10)	
ITA-81	Import Administration	Pos./BA	245	20,176	342	20,378	342	21,628	392	24,421	50	2,793
		FTE/Obl.	272	19,503	312	21,166	321		358		37	
ITA-115	United States and Foreign Commercial Service	Pos./BA	1,088	83,187	1,286	95,194	1,286	99,515	1,392	109,640	106	10,125
		FTE/Obl.	1,184	83,752	1,217	98,273	1,226		1,305		79	
	Total	**Pos./BA**	**2,021**	**167,502**	**2,446**	**178,859**	**2,446**	**181,156**	**2,577**	**189,020**	**131**	**7,864**
		FTE/Obl.	**2,190**	**169,976**	**2,303**	**186,069**	**2,331**		**2,422**		**91**	

Department of Commerce
International Trade Administration
Operations and Administration
SUMMARY OF REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

Comparison by Activity		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
International Trade											
Trade Development	FTE/Obl.	0	1,295	0	1,483	0	1,384	0	1,384	0	0
International Economic Policy	FTE/Obl.	0	110	0	126	0	117	0	117	0	0
Import Administration	FTE/Obl.	1	87	1	100	1	94	1	94	0	0
United States and Foreign Commercial Service	FTE/Obl.	27	14,407	29	16,413	29	15,405	29	15,405	0	0
Total	**FTE/Obl.**	**28**	**15,899**	**30**	**18,122**	**30**	**17,000**	**30**	**17,000**	**0**	**0**

Department of Commerce
International Trade Administration
Operations and Administration

SUMMARY OF FINANCING

(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) from 1990 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	185,874	204,191	198,156	206,020	7,864
Financing:					
Offsetting collections from:					
Federal funds	(2,299)	(2,995)	(2,400)	(2,400)	0
Trust funds	0	0	0	0	0
Non-Federal sources	(13,600)	(15,350)	(14,600)	(14,600)	0
Recoveries					
Unobligated balance, start of year	(4,001)	(7,210)	0	0	0
Unobligated balance transferred	0	0	0	0	0
Unobligated balance, end of year	7,210	0	0	0	0
Unobligated balance lapsing	0	0	0	0	0
Reimbursable sequester	0	223	0	0	0
Budget Authority	167,502	178,859	181,156	189,020	7,864
Transferred to	0	0	0	0	0
/from other accounts	0	0	0	0	0
Sequester	0	2,437	0	0	0
Appropriation	**167,502**	**131,296**	**181,156**	**189,020**	**7,864**

Department of Commerce
International Trade Administration
Operations and Administration
ADJUSTMENTS TO BASE
(Dollar amounts in thousands)

SUMMARY

	Perm. Pos.	FTE	Amount
ADJUSTMENTS:			
Management Savings: FTE Restoration	0	9	0
Import Administration base FTE	0	12	0
Foreign Trade Zones Base FTE	0	6	0
Non-recurring Programs	0	0	(6,360)
Subtotal, Adjustments	0	27	(6,360)
ESTIMATED COST CHANGES:			
1990 Pay Raise	0	0	2,943
1991 Pay Raise	0	0	1,590
Employees' Compensation Fund	0	0	148
Foreign Nationals wage increase	0	0	1,330
One extra compensable day	0	0	387
Civil Service Retirement (CSRS)	0	0	(69)
Federal Employees Retirement System (FERS)	0	0	147
Federal Insurance Contributions Act (FICA)			
Old Age Survivors and Disability Insurance (OASDI)	0	0	93
Hospital Insurance Tax (Medicare)	0	0	21
Health Insurance Premiums	0	0	592
Rental payments to GSA	0	0	499
Premium Utility Services	0	0	103
Federal Telecommunications System	0	0	(379)
Printing and reproduction	0	0	123
Working Capital Fund	0	1	167
National Communications System	0	0	1
Overseas price increases	0	0	961
Subtotal, cost changes	0	1	8,657
Total Adjustments to Base	**0**	**28**	**2,297**

JUSTIFICATION
(Dollar amounts in thousands)

Adjustments:	FTE	Amount
Management Savings FTE Restoration: In the calculation of ITA's 1991 planning level for FTE, the A-76 reduction of 9 was doubled. This occurred because the original requested FTE was 2,493 and not 2,484 as shown in the OMB tracking table. The A-76 FTE were taken out of the original number (2,493) and then were again reduced in the anticipated cost changes section of the table. ITA requests a restoration of 9 FTE for 1991.	9	0
Import Administration base FTE restoration: The Import Administration increase for the Office of Compliance (12 FTE); disallowed in the initial OMB allowance, was doubled to 24 FTE. On appeal all FTE were restored but only 12 were reflected in the FY 1991 final allowance. This results in a base reduction to Import Administration of 12 FTE. ITA requests a restoration of 12 FTE for 1991.	12	0
Foreign Trade Zones (FTZ) base FTE restoration: In the 1990 submission to OMB, the FTZ base program was proposed to be funded from Advances and Reimbursements. In OMB's final allowance for 1990, the program was restored to Operations and Administration. The dollar amounts for the base program were reflected for both 1990 and 1991, but the FTE transfer was reflected out of the 1991 A&R allowance, but not into the O&A for 1991 in the computation of the 1991 FTE planning level. ITA requests the restoration of 6 FTE for FTZ for 1991.	6	0
Non-recurring programs: In FY 1990, ITA was appropriated one-time sums of $3,360,000 for the New Materials Center (NMC), and $3,000,000 for the Tailored Clothing Technology Corporation (TC)[2]. These are non-recurring costs and are not required in FY 1991.	0	(6,360)

Estimated Cost Changes:

	FTE	Amount
1990 Pay Raise	0	2,943

Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, ITA is absorbing the full cost of this pay increase.

Adjustment for 1990 pay increase and related costs (in whole dollars):

Total cost in 1990 of pay increase	2,199,880
Less amount Absorbed	(2,199,880)
Anticipated 1990 pay increase supplemental .	0
Amount in 1991 to provide full-year cost of pay increase	2,943,423
Less amount absorbed	0
Total adjustment to base for 1991	**2,943,423**

	FTE	Amount
1991 Pay Raise	0	1,590

The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.

Adjustment for 1991 pay increases and related costs (in whole dollars):

Total cost in 1991 of general pay increase ..	2,384,000
Less amount absorbed	(1,192,000)
Subtotal, adjustment for 1991 general pay increase	1,192,000
Total cost in 1991 of SES pay increase	796,000
Less amount absorbed	(398,000)
Subtotal, adjustment for 1991 SES increase	398,000
Total adjustment to base for 1991	**1,590,000**

	FTE	Amount
Employees' Compensation Fund	0	148

ITA's Employees' Compensation Fund bill received in August of 1989 is $460,746.66. This is approximately $148,000 higher than the August 1988 billing of $312,680.24. Therefore, ITA requests an adjustment to base of $148,000.

Foreign Service Nationals Wage Increase

FTE	Amount
0	1,330

The FSN salary increase is for wage adjustments in 64 countries based on calculations utilizing econometric forecasting methodology. The FY 1990 fiscal plan FSN wages including benefits for each country is determined ($17,532,243). Econometric forecasting is then utilized to determine two components by country: A) The percentage of change in wages; B) The forecasting of FY 90 and FY 91 exchange rates. This data is then converted into an anticipated percentage increase factor for wages. In cases where data is unavailable, historical information is utilized to obtain a percentage factor. Once percentage factors are chosen for each country, the total ($1,329,914) is utilized as the anticipated ATB

STEP 1: Fiscal Plan FSN wages are calculated including benefits.
TOTAL: $17,532,243

STEP 2: Econometric modeling determines:
A: Percentage increase in wages.
B: Forecast of FY 90 and FY 91 exchange rates.

STEP 3: Utilizing the data in STEP 2, econometric modeling determines a percentage factor to forecast an adjustment to base for FY 91.
TOTAL: $1,329,914 is the ATB for all 64 countries.

One Extra Compensable Day

FTE	Amount
0	387

The cost of one more compensable day in fiscal year 1991 was calculated by dividing the fiscal year 1990 estimates for personnel compensation and those benefits impacted by 260 days which results in additional costs for one day.

Object Class	(in whole dollars) 1990 Estimate
11.1 Full-Time Permanent	$83,360,000
11.3 Other than Full Time Permanent	3,559,000
11.8 Special personnel services payments	100,000
Total compensation:	$87,019,000
Divided by 260 equals per day cost for compensation	$334,688
12.1 Civilian personnel Benefits	$16,715,000
Less: Health insurance	(2,651,000)
Employees compensation fund	(461,000)
Total Benefits	13,603,000
Divided by 260 equals per day cost for benefits	52,319
Total adjustment to base for 1991	**$387,007**

12.1 Civilian personnel benefits: **FTE** **Amount**

Civil Service Retirement System (CSRS) 0 (69)

The number of employees covered by the Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employees Retirement System (FERS). This decrease in employer contributions reflects a percentage decrease of 1.4% of employees under CSRS. (1990; 69.40%/1991; 68.00%).

Total salaries subject to retirement for 1990 (in whole dollars): Ex level, SES, GM, GS $58,768,000

	1990	1991
CSRS participation rate:	69.40%	68.00%
CSRS contribution rate:	7.00%	7.00%
CSRS cost:	2,854,949	2,797,357

Adjustment to base for 1991 ($2,797,357 - $2,854,949 = ($57,592))

Total salaries subject to retirement for 1990 (in whole dollars): Foreign Service $11,196,000

	1990	1991
CSRS participation rate:	69.40%	68.00%
CSRS contribution rate:	7.50%	7.50%
CSRS cost:	582,752	570,996

Adjustment to base for 1991 ($570,996 - $582,752 = ($11,756))

Federal Employee's Retirement System (FERS) 0 147

The number of employees covered by FERS continues to rise as employees covered by CSRS leave and are replaced by employees covered by FERS. We estimate that the percentage of payroll eligible employees covered by FERS will rise from 30.60% in 1990 to 32.00% in 1991. In addition the agency's contribution for basic benefits will rise from 12.97% to 13.00%. For Foreign Service Officers the contribution rate will stay at 21.86%.

Total salaries subject to retirement for 1990 (in whole dollars): Ex. Level, SES, GS, GM $58,768,000

	1990	1991
FERS participation rate:	30.60%	32.00%
FERS contribution rate:	12.97%	13.00%
FERS cost:	2,332,396	2,444,748

Adjustment to base for 1991 ($2,444,748 - $2,332,396 = $112,352)

Total salaries subject to retirement for 1990 (in whole dollars): Foreign Service $11,196,000

	1990	1991
FERS participation rate:	30.60%	32.00%
FERS contribution rate:	21.86%	21.86%
FERS cost:	748,918	783,183

Adjustment to base for 1991 ($783,183 - $748,918 = $34,265)

Federal Insurance Contributions Act (FICA):

	FTE	Amount
Old Age, Survivors, and Disability Insurance (OASDI)(FERS-related)	0	93

Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI) but are covered by Hospital Insurance (Medicare). All other employees, except Foreign Service Nationals, are covered by both OASDI and Medicare. As the percentage of payroll covered by FERS rises the cost of OASDI contributions will increase. In addition, the maximum salary subject to FICA tax will rise to $52,725 in FY 1991 from $50,025 in FY 1990, and the OASDI tax rate will increase from 6.17% in FY 1990 to 6.20% in 1991.

Total salaries subject to retirement for 1990 (in whole dollars): Ex. Level, SES, GS, GM $58,768,000

	1990	1991
FERS participation rate:	30.60%	32.00%
Salaries subject to FICA (percent):	92.02%	93.74%
OASDI rate:	6.17%	6.20%
FERS-related OASDI cost:	1,021,009	1,092,968

Adjustment to base for 1991 ($1,092,968 - $1,021,009 = $71,959)

Total salaries subject to retirement for 1990 (in whole dollars): Foreign Service $11,196,000

FERS participation rate:	30.60%	32.00%
Salaries subject to FICA (percent):	80.19%	83.44%
OASDI rate:	6.17%	6.20%
FERS-related OASDI cost:	169,508	185,344

Adjustment to base for 1991 ($185,344 - $169,508 = $15,836)

				FTE	Amount
Federal Insurance Contributions Act (OASDI) (Other):					
Total salaries subject to FICA for 1990 (in whole dollars): Other than permanent			$3,559,000		

	1990	1991
Salaries subject to FICA (percent):	92.02%	93.74%
OASDI rate:	6.17%	6.20%
Other OASDI cost:	202,067	206,845

Adjustment to base for 1991 ($206,845 - $202,067 = $4,778)

		FTE	Amount
Medicare		0	21

All employees are subject to medicare contributions (except Foreign Service Nationals). The rate will remain at 1.45%, but the percentage of payroll subject to FICA will increase from 80.19% for Foreign Service Officers in 1990 to 83.44% in 1991, and 92.02 % for all others in 1990 to 93.74% in 1991. The cost of medicare will increase as follows:

Total salaries for 1990 (in whole dollars): Exec. Level, SES, GM, GS, other $62,327,000

	1990	1991
Salaries subject to FICA (percent):	92.02%	93.74%
Medicare rate:	1.45%	1.45%
Medicare cost:	831,623	847,167

Adjustment to base for 1991 ($847,167 - $831,623 = $15,544)

Total salaries for 1990 (in whole dollars): Foreign Service $11,196,000

	1990	1991
Salaries subject to FICA (percent):	80.19%	83.44%
Medicare rate:	1.45%	1.45%
Medicare cost:	130,182	135,458

Adjustment to base for 1991 ($135,458 - $130,182 = $5,276)

Health Insurance Premiums

	FTE	Amount
Health Insurance Premiums	0	592

The cost of the Governments contribution to the Federal Employees' health insurance premiums increased from 1988 to 1989 an average of $310.08 per enrollment a 22.32% increase. The increase requested is 22.32% of the 1990 estimate for health benefits.

Survey as of 4/20/88 and 4/24/89	1988	1989
Health benefit enrollments	1,400	1,404
Annual cost of enrollees	1,944,670	2,385,578
Average Cost of Enrollment	1,389.05	1,699.13

Increased cost 1989 less 1988 (1,699.13-1,389.05=$310.08)
Percentage increase 1989/1988 ($310.08/1,389.05=22.32%)
1990 Estimate for health insurance $2,651,000
1991 Adjustment to base ($2,651,000 x 22.32%= $591,703)

23.1 Rental Payments to GSA:

	FTE	Amount
23.1 Rental Payments to GSA	0	499

ITA estimates the cost of currently occupied space in FY 1991 will increase by the construction inflation factor of 4.4%. This percentage increase is applied to the adjusted planning level for 1991 computed as follows:

	(in whole dollars)
GSA's preliminary average increase	4.40%
1990 estimate	$11,337,000

23.1 Communications, utilities, and miscellaneous charges

Premium Utility Services

	FTE	Amount
Premium Utility Services	0	103

ITA regularly requests overtime heating and air-conditioning for the Under Secretary's offices and the rooms where the centralized computer equipment is located. In past years the major portion of these costs were absorbed by facilities management with ITA being billed the weekend costs which amounted to $37,000 in 1988. Now ITA has been informed by the building manager we will be billed for actual services supplied. In 1989 this will amount to $35,000 per quarter or $140,000 per year.

	(in whole dollars)
1989 Base for Utility services	$37,000
1989 Estimate for Utility services	140,000
Adjustment to base for 1991	**$103,000**

	FTE	Amount
Federal Telecommunications System	0	(379)

Following the implementation of FTS-2000, GSA anticipates lower rate charges for telephone services.

Adjustment to base for 1991	**($379,000)**

	FTE	Amount
24.0 Printing and Reproduction	0	123

The cost of domestic printing (both paper and labor) continues to increase. The increase is intended to offset a portion of the increase which has occurred in the past year and represents 7% of the 1990 estimate (less overseas printing).

	(in whole dollars)
1990 Estimate for printing	$2,046,000
Less: Estimate for overseas printing	(288,000)
Subtotal: Domestic Printing:	$1,758,000
GPO 1991 Increase (percentage)	7.00%
Adjustment to base for 1991	**$123,060**

25.0 Other Services

	FTE	Amount
Working Capital Fund	1	167

This increase is to fund the consistently high cost increases in the Departmental Working Capital Fund (WCF) to maintain their current level of operation. Estimates from the Department project a 3.45% increase for 1991. One FTE is a Departmental transfer to ITA from USTTA. This is in connection with the transfer of personnel servicing responsibility for overseas USTTA staff from the Office of Personnel Operations, Office of the Secretary to the U.S. and Foreign Commercial Service (US&FCS).

	(in whole dollars)
1990 Estimate for WCF	$8,083,000
Estimate percentage increase for 1991	2.07%
Adjustment to base for 1991	**$167,318**

	FTE	Amount
National Communications System ITA's pro-rata share of the Department's National Communications System is $1,404 in 1990 and $2,668 in 1991.	0	1
Overseas Price Increases The same methodology is applied to the determination of Overseas Price Increases as was outlined for the Foreign Service Nationals Wage Increases.	0	961

STEP 1: Fiscal Plan increases are calculated.

TOTAL: $15,106,208

STEP 2: Econometric modeling determines:
A: Percentage increase in prices.
B: Forecast of FY 90 and FY 91 exchange rates.

STEP 3: Utilizing the data in STEP 2, econometric modeling determines a percentage factor to forecast an adjustment to base for FY 91.

	(in whole dollars)
Overseas Prices	$234,915
U.S. Allowances	91,839
Foreign Affairs Administrative Support Foreign Operations, Temporary Living Allowances, Foreign Operations Management	519,670
Export Promotion Services	115,038
Total adjustment to base for all 64 countries:	**$961,462**

Appropriation Language and Code Citations:

1. "For necessary expenses for international trade activities of the Department of Commerce;"

15 U.S.C. 649
15 U.S.C. 1501 et seq.
15 U.S.C. 1871
15 U.S.C. 4001 et seq.
15 U.S.C. 4011 et seq.
19 U.S.C. 81a et seq.
19 U.S.C. 1202
19 U.S.C. 1202 nt.
19 U.S.C. 1303
19 U.S.C. 1671 et seq.
19 U.S.C. 1673 et seq.
19 U.S.C. 2031
19 U.S.C. 2155
19 U.S.C. 2354
19 U.S.C. 2411 et seq.
22 U.S.C. 3901 et seq.
22 U.S.C. 2451 et seq.
22 U.S.C. 2651 et seq.
22 U.S.C. 3101 et seq.
40 U.S.C. 512

15 U.S.C. 649 requires the Secretary of Commerce to establish export promotion centers and authorizes the awarding of grants (including contracts and cooperative agreements) to encourage the development and implementation of small business international marketing programs.

15 U.S.C. 1501 et seq. provides the basic authority for performance of those functions and activities of ITA which promote an improved trade posture for United States industry.

15 U.S.C. 1871 provides the authority for an annual, comprehensive assessment of the state of the automobile industry and its interaction in an integrated economy.

15 U.S.C. 4001 et seq., 4011 et seq. (Export Trading Company Act of 1982) requires the establishment of an antitrust certification program and the promotion of export trading companies.

19 U.S.C. 81a et seq. establishes the Foreign-Trade Zones Board and designates the Secretary of Commerce as Chairman and executive officer of the Board.

19 U.S.C. 1202 provides the Department of Commerce with the authority to develop, maintain, and publish a list of bona fide motor-vehicle manufacturers.

19 U.S.C. 1202 nt. provides authority for two import control programs, the Watch Quota program and the Florence Agreement program.

19 U.S.C. 1303 authorizes the investigation as to whether a foreign government has paid or is paying a bounty or grant upon the manufacture, production, or export of merchandise imported into the United States, and if so, requires the determination and imposition of countervailing duties upon such merchandise. This section is limited to merchandise from a country not covered by the Agreement on Subsidies and Countervailing Measures or from a country which has not assumed obligations similar to those contained in such Agreement.

19 U.S.C. 1671 et seq. authorizes the investigation as to whether a foreign government has paid or pays a subsidy upon the manufacture, production, or export of merchandise imported into the United States, and if the International Trade Commission finds requisite injury, requires the determination and imposition of countervailing duties upon such merchandise. This section applies to merchandise from countries covered by the Agreement on Subsidies and Countervailing Measures or from countries which have assumed obligations similar to those contained in the Agreement.

19 U.S.C. 1673 et seq. authorizes the investigations as to whether foreign merchandise is, or is likely to be, sold in the United States at less than fair value and, if so, and if the International Trade Commission finds requisite injury, requires the determination and imposition of antidumping duties upon such merchandise.

19 U.S.C. 2031 provides the authority to promulgate rules and regulations pertaining thereto under Section 501(2) of Title V of the Automotive Products Trade Act of 1965.

19 U.S.C. 2155 authorizes the President to organize, through the U.S. Trade Representative and the Secretaries of Commerce, Labor, and Agriculture, policy and sector advisory committees composed of representatives from industry, labor, agriculture, and services. These committees provide policy and technical advice on international trade negotiating objectives and bargaining positions, the operation of trade agreements, and with respect to other matters involving the administration of U.S. trade policy.

19 U.S.C. 2354 requires the Bureau of Industrial Economics to prepare studies, reports, and information activities for the Secretary of Commerce in response to investigations and findings of the International Trade Commission under 2251 of Title 19 to determine eligibility for adjustment assistance, except that reports to submitted to the President shall be issued by the Secretary, and responsibility for assistance in preparation and processing of petitions and applications under Subsection 264 (c) shall be vested in the Assistant Secretary for Economic Development.

19 U.S.C. 2411 et seq. provides procedures for determinations and actions to be taken to enforce the rights of the United States under any trade agreement, or to respond to any act, policy, or practice of a foreign country that is inconsistent with the provisions or any trade agreement, that burdens or restricts United States commerce.

22 U.S.C. 3901 et seq., the Foreign Service Act of 1980 consolidated and revised the laws relating to the Administration and operations of the Foreign Service of the United States. Under Reorganization Plan No. 3 of 1979 and Executive Order 12188, the Secretary was authorized to establish and administer the Foreign Commercial Service and to utilize therefore the authorities of the Foreign Service Act.

22 U.S.C. 2451 et seq. authorizes the President to provide for U.S. participation in international fairs and expositions, including trade and industrial fairs and other public or private demonstrations of U.S. economic accomplishments. ITA provides a wide range of trade exhibitions overseas.

22 U.S.C. 2651 et seq. establishes the Department of State and provides authority for a number of overseas operations. Reorganization Plan No. 3 of 1979 and Executive Order 12188 authorize the utilization of certain of these authorities in connection with the operation of the Foreign Commercial Service.

22 U.S.C. 3101 et seq. authorizes the President to conduct surveys and studies of both United States direct investment abroad as well as foreign direct and portfolio investment in the United States. ITA monitors, analyzes, and reports to Congress on specific aspects of international investment which may have significant implications for the economic welfare and national security of the United States.

40 U.S.C. 512 provides authority for the administration of the Foreign Excess Property program.

2. "Including trade promotional activities abroad without regard to the provisions of law set forth in 44 U.S.C. 3702 and 3703;

No Specific Authority

44 U.S.C. 3702 specifies that an executive department may not publish or pay for advertisements without written authority from the head of that department.

The nature of ITA's overseas exhibition program requires maximum flexibility in advertising requirements since exhibitions may be changed, added, or canceled. When such changes take place, advertisements must be placed as soon as possible to inform the local business community. This exception from 44 U.S.C. 3702 will provide the flexibility which is required to effectively advertise for these exhibitions.

44 U.S.C. 3703 stipulates that prices paid for advertising may not exceed the commercial rates charged to provide individuals, with the usual discounts.

Since the United States Government does not have sovereign status in other countries and is charged commercial rates without the discounts required by 44 U.S.C. 3703, this exception is necessary to permit contracting in a manner which conforms to the realities of foreign advertising markets.

3. "full medical coverage for dependent members of immediate families of employees stationed overseas;"

No Specific Authority

This language permits the International Trade Administration to extend to certain of its overseas employees the same benefits afforded domestically employed Federal employees and employees of ITA's Foreign Commercial Service in equivalent positions overseas.

4. "employment of Americans and aliens by contract for services abroad;"

No Specific Authority

44 CG 761, OPM guidance, and House Report 89-188 have concluded that Federal agencies must have specific authority to employ personnel by contract. In order to present its overseas exhibitions ITA often requires the use of narrators, demonstrators, receptionists, clerical, and facilities maintenance personnel who speak the language of the host country; are familiar with local practices and procedures; or who only need to be employed for a short period of time. In some cases, however, it is more advantageous to employ U.S. citizens in the host country (generally members of an employee's family) because they have greater familiarity with American methods and, therefore, require less effort to train.

5. "rental of space abroad for periods not exceeding ten years, and expenses of alternation, repair, or improvements;"

No Specific Authority

40 U.S.C. 278a prohibits expenditures for building rental if the rent is more than 15 percent over the fair market value of the premises and prohibits expenses for alterations, improvements, and repairs of rented premises which exceed 25 percent of the rent.

Buildings, pavilions, and space in such structures must be rented for exhibitions. Rental terms are established by fair authorities and may or may not exceed the percentage provision in 40 U.S.C. 278a. Without this waiver, the program may be prohibited from exhibiting at certain fairs which support ITA's trade development objectives. The installation of exhibits in rented buildings requires that certain alterations and improvements be made. To limit expenditures for such alterations and improvements would seriously restrict the quality and effectiveness of the exhibitions.

6. "purchase or construction of temporary demountable exhibition structures for use abroad;"

No Specific Authority

40 U.S.C. 601 prohibits the construction of public buildings except by the Administrator of the General Services Administration. Authority to purchase or construct such demountable structures in necessary to allow ITA to present exhibitions overseas when permanent exhibition facilities are not available. 41 U.S.C. 10a permits the purchase of articles, materials, or supplies in foreign countries when they are to be used in that country.

7. "payment of tort claims, in the manner authorized in the first paragraph of 28 U.S.C. 2672 when such claims arise in foreign countries;"

No Specific Authority

28 U.S.C. 2672 provides for settlement of tort claims for money damages of $2,500 or less against the Unites States by the head of each federal agency for loss of property or personal injury or death caused by a negligent or wrongful act of any employee of the Government while acting within the scope of his employment in circumstances where the Unites States, if a private person, would be liable under local law. However, 28 U.S.C. 2680 exempts the settlement of tort claims which arise abroad from the provisions of 28 U.S.C. 2672. The language requested would exempt ITA from 22 U.S.C. 2680 and would cover the settlement of tort claims against the United States which arise in connection with the ITA's trade promotion activities abroad.

8. "not to exceed $300,000 for official representation expenses abroad;"

No Specific Authority

5 U.S.C. 5536 prohibits additional pay, extra allowances, or compensation unless the appropriation explicitly states that it is for such additional pay, extra allowances, or compensation.

9. 31 U.S.C. 1343(a) authorizes the "purchase of passenger motor vehicles for official use abroad and motor vehicles for law enforcement use with special requirement vehicles eligible for purchase without regard to any price limitation otherwise established by law,"

31 U.S.C. 638(a) prohibits the purchase of passenger motor vehicles unless specifically authorized by the appropriation concerned or other law with the exception of those for the use of the President of the United States, the secretaries to the President or the head of the executive departments.

10. 31 U.S.C. 1301 " to remain available until expended,"

No Specific Authority

31 U.S.C. 718 provided that appropriations are for the service of the current year "unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provision."

11. "provided, that the provisions of the first sentence of section 105(f) and all of section 108(c) of the Mutual Educational and Cultural Exchange Act of 1961 (22 U.S.C. 2455(f) and 2458(c)) shall apply in carrying out these activities."

No Specific Authority

22 U.S.C. 2455(f) provides authority to accept contributions of funds, property and services from foreign governments, international organizations and private individuals, firms, associations, agencies, and other groups in carrying out the activities concerned with exhibits pursuant to the Mutual Educational and Cultural Exchange Act of 1961.

22 U.S.C. 2458(c) provides authorization for all necessary expenditures involved in the selection, purchase, rental, construction, or other acquisition of exhibitions and the necessary supplies therefor.

This phrase provides for extension of this authority and permits ITA to collect funds for use in conducting trade promotion events abroad.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM AND PERFORMANCE:DIRECT OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Trade Development											
Management and policy coordination [1]	Pos./BA	22	1,755	48	2,881	48	3,036	48	3,036	0	0
	FTE/Obl.	26	2,087	48	2,954	48		48		0	
Sectoral analysis	Pos./BA	310	31,910	376	31,743	376	26,904	373	26,711	(3)	(193)
	FTE/Obl.	333	31,736	361	32,762	366		363		(3)	
Trade information and analysis [1]	Pos./BA	112	8,359	116	7,137	116	7,530	115	7,539	(1)	9
	FTE/Obl.	119	9,262	100	7,482	100		99		(1)	
Trade adjustment assistance	Pos./BA	20	5,795	11	4,543	11	4,543	0	0	(11)	(4,543)
	FTE/Obl.	20	6,220	11	5,802	11		0		(11)	
Total	**Pos./BA**	**464**	**47,819**	**551**	**46,304**	**551**	**42,013**	**536**	**37,286**	**(15)**	**(4,727)**
	FTE/Obl.	**498**	**49,305**	**520**	**49,000**	**525**		**510**		**(15)**	

[1] FY 1990 and 1991 estimates reflect a shift of functions from Trade Information and Analysis to Management and Policy Coordination (22 FTE; 22 Pos.; and $1.3 million).

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM AND PERFORMANCE:REIMBURSABLE OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		**1990 Currently Available**		**1991 Base**		**1991 Estimate**		**Increase/ (Decrease) over 1991 Base**	
		Pers.	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**
Trade Development											
Management and policy coordination	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Sectoral analysis	FTE/Obl.	0	1,162	0	1,331	0	1,242	0	1,242	0	0
Trade information and analysis	FTE/Obl.	0	133	0	152	0	142	0	142	0	0
Trade adjustment assistance	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Total	**FTE/Obl.**	**0**	**1,295**	**0**	**1,483**	**0**	**1,384**	**0**	**1,384**	**0**	**0**

JUSTIFICATION OF PROGRAM AND PERFORMANCE FOR
TRADE DEVELOPMENT

Goals and Objectives for FY 1991

Goals: The goal of this subactivity is to increase America's competitiveness in the world economy by advancing U.S. business sector interests in international trade.

Objectives: Trade Development (TD) will achieve this goal by: increasing U.S. exports of goods and services; expanding foreign markets by removing barriers to trade, services and investment; increasing the number of small and medium sized exporters; taking prompt, aggressive action against unfair trade practices; and providing accurate and timely information and services to U.S. exporters. A strong exporting sector is essential to improving the U.S. trade position and is a significant source of economic growth and employment. Fundamental to a strong exporting sector are inter-related factors such as: U.S. competitiveness, an open international economy, and aggressive marketing. In order to increase U.S. exports of goods and services we must: (1) encourage foreign demand for U.S. products; (2) overcome barriers to market access for U.S.-produced goods and services; and (3) promote export expansion efforts by U.S. business and industry. Through its varied trade policy, industry analysis, and promotional activities, coordination with other ITA units, as well as close cooperation with U.S. industry, Trade Development (TD):

- develops trade policies and initiatives to increase sectoral exports and reduce or remove barriers affecting the competitiveness of U.S. industries, and participates in negotiations to improve U.S. export opportunities on a multilateral or bilateral basis, including the Uruguay Round of Multilateral Trade Negotiations;
- identifies trade, finance and investment opportunities for the U.S. and discerns factors which affect the fundamental health of the world economy and the competitiveness of U.S. goods and services in international markets, including both domestic regulatory obstacles and foreign market access constraints; and
- initiates trade promotion strategies in cooperation with U.S. industries which allow U.S. firms to take advantage of opportunities in the world economy and which also strengthen the international trade and investment position of the United States.

TD's Management and Policy Coordination activity provides analysis for ITA trade policy development through the President's Export Council and the Industry Advisory Committees for Trade Policy matters, as well as overall TD trade policy and export promotion coordination.

TD's Sectoral Analysis activity develops sectoral trade strategies; increases U.S. industry participation in U.S. trade development by identifying and evaluating priority foreign markets and key trade barriers which, if removed, represent opportunities for increases in U.S. exports; and develops trade policy initiatives which contribute to bilateral and multilateral negotiations to facilitate U.S. exports.

TD's Trade Information and Analysis activity provides information, analysis, and forecasts to support U.S. industry efforts to become more competitive by identifying and analyzing major factors having the greatest impact on U.S. trade prospects and by representing U.S. industries' interests in policy development within the U.S. Government (USG) and in international trade negotiations.

Base Program

Management and Policy Coordination -- This area provides central management, through the authority of the Assistant Secretary, to ensure policy and program consistency across the various units of TD. It includes the Office of Planning and Coordination and the Office of Program and Resource Management (OPRM).

Planning and Coordination identifies and evaluates major international trade issues; conducts research to identify problems and opportunities facing U.S. exporters; manages assignments for the Assistant Secretary and reports requested by other agencies; and coordinates the overall formulation of TD policy aimed at furthering U.S. interests in international trade and investment. It supports the President's Export Council, which reports to the President through the Secretary of Commerce on issues in the field of export expansion. Members include Executive Branch officials, Members of Congress, and representatives of business, agriculture and labor.

Program and Resource Management, which was reflected under the Trade Information and Analysis line item prior to FY 1990, supports the Industry Consultations Program (managed jointly by Commerce and the USTR) mandated by the Trade Act of 1974 and 1988 to advise on trade policy matters. There are 17 Industry Sector and three Functional Advisory Committees, a Committee of Chairmen, and the Industry Policy Advisory Committee. Support includes coordination of the substantive agenda and attending to the many details of managing operations. OPRM also manages TD's export promotion programs to foster increased sales of U.S. manufacturing and service industries abroad through direct marketing activities. This includes analysis of U.S. export potential in foreign markets, export market research, and similar export expansion program activities. It also coordinates overseas trade and investment events for state development agencies.

Sectoral Analysis -- The sector analysis program operates seven sector groups--Aerospace, Automotive Affairs and Consumer Goods, Basic Industries, Capital Goods and International Construction, Science and Electronics, Services, and Textiles and Apparel. Each sector group supports increased competitiveness of U.S. industries in world markets through research on, and analysis of, major trade issues; development of proposed remedial actions/policies; projection of industry trends and performance; liaison with U.S. private sectors; and development of export promotion programs that support foreign market access. A sector's program activities are tailored to the specific needs of its industries. Consequently, some sectors concentrate on increasing foreign market access and export promotion while others focus more on the level of import competition in the U.S.

The sector groups maintain a high level of expertise on the status and prospects of all U.S. industries. They monitor essential data, including production, costs, prices, financial and labor conditions, technological changes, distribution, markets, trade patterns, and other factors in order to understand and support U.S. industries; perform research and analysis on key issues; support Presidential actions under U.S. trade law; and monitor trade trends, etc., in sensitive industries. This information is disseminated through industry and firm counseling and is used to support other programs operated by ITA, the U.S. Government and the private sector. Within ITA, TD's sector groups support policy development, export expansion and trade promotion activities, major projects initiatives, and other programs such as industrial mobilization programs and activities requiring industry-specific technical assistance. The groups prepare appropriate sections of the annual U.S. Industrial Outlook and other industrial publications. The groups maintain close liaison with Industry Sector Advisory Committees (ISACs), other Government agencies and private sector industry and trade associations.

Specific sector group activities include:

- preparing briefing papers that disseminate domestic and international industry and trade information to Government and the private sector;
- participating in domestic export conferences to promote industry awareness of foreign market opportunities;
- planning, organizing, and recruiting participants for trade promotion events managed by industry sectors and/or US&FCS overseas posts;
- participating in the development of policy positions and negotiating strategies for use in U.S. Government dealings with international bodies, including multilateral and bilateral negotiations;
- providing analysis and policy development for follow-on activities necessary to implement decisions of the Administration's Strike Force against unfair trade practices chaired by the Secretary;
- implementing legislatively mandated trade laws concerning the annual review of the Generalized System of Preferences (GSP) program and import relief cases (national security and injurious competition basis);
- analyzing and commenting on proposed product-specific trade legislation;
- supporting the seventeen Industry Sector Advisory Committees (ISACs) which are consultative bodies made up of private-sector authorities on specific industries;
- collecting, analyzing, and preparing appropriate industry material for the U.S. Industrial Outlook and other publications that provide domestic and international industry analyses and forecasts;
- identifying trade barriers and trade opportunities in order to increase industry sector competitiveness abroad; and
- preparing Competitive Assessments which are in-depth, intensive economic analyses on the present and long-term domestic and international competitiveness of specific U.S. industry sectors.

In addition to these functions, certain activities and functions are unique to one or more sectors, as follows:

- **Aerospace** supports U.S. aerospace companies competing overseas with early background information. It coordinates USG assistance in specific critical export sales campaigns. The group maintains a close liaison with the U.S. aerospace industry through the key trade associations, ISAC-1 (Aerospace Equipment) and individual companies; provides analytical support on a vast array of policy options and recommendations that affect the international competitive position of this industry; fosters improvements in its trade balance by identifying policy alternatives; works to influence those issues deemed relevant to the industry; works directly with individual companies on specific trade opportunities; and provides opportunities to promote their goods and services in foreign markets. Aerospace monitors and implements the GATT Agreement on Trade in Civil Aircraft to ensure that the principles are observed by other signatories and that U.S. manufacturers are not disadvantaged in the international marketplace. It develops the Department's position for international negotiations and discussions relative to that Agreement. In cooperation with the Office of International Finance, Aerospace monitors the implementation of the OECD Sector Understanding on Export Credits for Aircraft and develops the Department's position for international negotiations and discussions relative to that Agreement. TD Aerospace organizes and manages the USA National Pavilion at the Biennial Paris Air Show, which takes more than a year of preparation, services 100-150 exhibitors, and has an operating budget supported by user fees of more than $1.5 million; organizes and manages other trade promotion activities, such as trade missions and Aerospace Product Information Centers in international Aerospace trade shows; and, in collaboration with an industry trade association, organizes a series of domestic USG/industry conferences on aerospace export opportunities and challenges in critical markets. A new area of responsibility is fostering the competitiveness of the U.S. Commercial Space industry.

- **Automotive Affairs and Consumer Goods (AACG)** develops initiatives to increase sales opportunities in foreign and domestic markets. For example, the auto parts initiative should increase U.S. auto parts sales to Japanese and Korean auto manufacturers; and export promotion initiatives will bring high quality U.S. consumer goods (e.g. leisure goods, sporting equipment, furniture, processed foods and jewelry) to the attention of foreign consumers. AACG provides in-depth analysis and policy recommendations for: (1) the removal of foreign trade barriers; (2) USG participation in multinational and bilateral trade negotiations; (3) revision of U.S. regulatory programs affecting the competitiveness of U.S. automotive and consumer goods industries; and (4) the impact of imports on U.S. industry. AACG also publishes two mandated reports (Status of the U.S. Automobile Industry and The Annual Report on the Operation of the Automotive Products Trade Act of 1965).

- **Basic Industries (BI)** prepares and issues a mineral and mining study mandated by Congress; manages Commerce's responsibilities under the Solid Waste Disposal Act, as amended (P.L. 96-482); and has the lead U.S. Government role in (1) the implementation of the National Coal Export Policy, including the performance of a number of studies on the coal industry, (2) the implementation of the coal and oil sections of the Reagan/Nakasone Joint Statement on Energy Cooperation, and (3) the Energy Subgroup of the joint U.S./Korean Economic Consultative Group. BI is responsible for reports and studies mandated by the International Security and Development Cooperation Act of 1985 (P.L. 99-83) and Section 126 of the Export Administration Act of 1985 (P.L. 99-64). It provides the National Security Council (NSC) with strategic stockpile substitution analyses; provides the Federal Emergency Management Agency (FEMA) with over 100 Strategic Stockpile Planning Reports annually; and, under the Defense Production Act, conducts several mandatory industry surveys for use in Mobilization Planning. BI develops the U.S. position on commodities and represents the USG at, and/or participates in, the International Commodity Negotiations concerning world market stabilization and the access to commodities for which the U.S. is critically import dependent. BI publishes the Construction Review bimonthly.

- **Capital Goods and International Construction (CGIC)** assists U.S. engineering, construction and equipment firms to obtain contracts for major construction projects abroad and to compete successfully for major product procurements; maintains the database on, and assists firms to take advantage of, the March 1988 U.S.-Japanese Public Works Agreement which provides access to Japan's construction market for selected projects; works with the staff of the Ex-Im Bank regarding foreign major projects involving U.S.

firms and provides advice on these and similar projects to Commerce's representatives on the Ex-Im Bank Board and on the National Advisory Council; maintains close contact with the staffs of several Multilateral Development Banks (MDB) in support of the international major projects program and general export promotion efforts; works with the World Bank and Inter-American Development Bank to provide U.S. firms with information and assistance on export opportunities and activities; makes MDB and USG foreign assistance documents available to the U.S. business community; and addresses the issues and barriers relating to specific project opportunities through the Interagency Major Projects Coordinating Group. CGIC also is responsible for the USDOC/DOE Joint Program to promote the export of Renewable Energy Equipment, including chairing the Market Development Subcommittee and Renewable Energy Technology Symposium and International Exposition (RETSIE) Subcommittee of the interagency Committee on Renewable Energy Commerce and Trade (CORECT); and for managing, in cooperation with FEMA and DOD, the Machine Tool Trigger Order Program which negotiates stand-by production agreements with U.S. manufacturers of selected machine tools which will be needed in event of a national emergency. CGIC monitors Defense Department procurement and surplus disposal activities to ensure that no adverse impact on the domestic economy occurs; works closely with industry organized Export Councils in the electric power, renewable energy, and water resources equipment industries; and takes the lead in supporting U.S./U.S.S.R. Industry Trade Development Working Groups and the Heavy Electrical Equipment Trade Negotiations.

- **Science and Electronics (S&E)** is responsible for managing international trade issues dealing with U.S. high-technology electronics industries: computers, software, telecommunications, semiconductors, medical equipment, and instrumentation. Its efforts include negotiations aimed at improving access for these highly competitive sectors in key foreign markets through the Market Oriented Sector Selective (MOSS) talks in electronics, telecom, and medical; telecom trade agreement negotiations with the European Community and Korea; and in the case of Japan, specific agreements such as the Semiconductor Arrangement and the Supercomputer Agreement. S&E fosters fair trade in semiconductors (antidumping cases), supercomputers and satellites (the on-going Super 301 cases with Japan), and is pressing for removal of telecom and other priority trade barriers in international markets both bilaterally and in the Uruguay Round. S&E plays a lead role in protecting intellectual property rights internationally, especially in the software and semiconductor areas where these are crucial to U.S. international competitiveness. The unit is a key contributor to the Special 301 action in intellectual property. S&E is actively influencing domestic and trade legislation of importance to high-technology industries (e.g., telecom trade bills, capital gain taxes, antitrust reforms, and R&D credit). Finally, S&E is involved in TD's most ambitious trade promotion program, keying major events to priority overseas markets such as the Soviet Union, Poland, Hungary, and Latin America reflecting the export orientation of this dynamic and fast-growing sector.

- **Services** conducts the Service Industries Development Program, mandated by Section 306(a) of the Trade and Tariff Act of 1984 (P.L. 98-573), to promote the international competitiveness of U.S. service industries, and to perform specialized trade promotion, analytical and data improvement activities (in conjunction with the data collection agencies). Services provides staff support for, and participates in, Uruguay Round trade negotiations on services and in bilateral negotiations concerning service sectors. Staff members participate in the activities of several OECD Committees to promote policies liberalizing services trade which are conducive to sustained international economic growth. Services also works to provide its industries with current information on the status of Europe 1992, as well as to develop a strategy to promote U.S. trade interests in the services sector in the EC 1992 process. Services implements the Department's responsibilities under the Export Trading Company Act of 1982. In this regard, Services administers the Title III antitrust certificate of review program; issues guidelines and explanatory materials; identifies groups likely to benefit from the ETC method of organization; counsels firms seeking antitrust certification; maintains a contact facilitation service; and coordinates Commerce/Government-wide efforts to promote ETC's, and other export trade intermediaries.

- **Textiles and Apparel (T&A)** provides staff support for, and participates in, negotiations of bilateral textile and apparel import restraint agreements; implements provisions of the bilateral agreements; monitors textile and apparel imports; chairs and provides staff support for the Committee for the Implementation of Textile Agreements (CITA); and determines when disruptive imports require the establishment of import quotas. Executive Order 11651, dated March 3, 1972, established CITA, chaired by Commerce, to supervise the implementation of all textile trade agreements under the Multifiber Arrangement Regarding International Trade in Textiles (MFA). The MFA became effective January 1, 1974, and was most recently extended on July 31, 1986, for a period of five years. T&A also administers a sector-specific export expansion program, which involves exhibitions, trade missions, export seminars, in-store promotions, market research, and a foreign buyer program.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Evaluative, Analytical or Position Papers, and Reports	2,160	2,000	2,000
Interagency or International Sectoral Meetings/Negotiations	400	500	500
Prepare Departmental Positions and Comments on Legislation	250	250	250
Industry Sector Advisory Committee Meetings	118	118	90
Industry Policy Advisory Committee Meetings	3	3	3
Committee of Chairmen Meetings	4	4	4
Competitive Assessments (industry sector specific)	12	4	4
Major Projects Leads Disseminated	350	375	400
Major Projects Export Sales Facilitated ($millions)	389	400	350
Trade Promotion Events (missions, seminars, shows, etc.) Recruited and Supported (excluding certified shows)	74	76	56
Applications Processed for Antitrust Export Trading Company Certificates of Review	15	15	15
Firms Covered by Antitrust Export Trading Company Certificates of Review	4,500	5,000	5,300

Trade Information and Analysis (TIA) -- TIA acts as ITA's primary arm for macro-economic trade, finance, investment, and cross-industry analysis and forecasting. TIA conducts major economic, trade and investment studies, often in cooperation with the seven sector groups; and provides general statistical data, information, and analysis regarding the impact of alternative trade and investment policy initiatives on the U.S. economy. TIA serves as ITA's point of coordination for conducting multi-industry studies and cross-organization projects.

Specifically, TIA responsibilities include: coordination of TD's role in bilateral and multilateral (to include Uruguay Round) negotiations and actions under U.S. trade law; reviewing proposals and monitoring problems arising from conversion to the Harmonized System (HS); coordinating annual review of Generalized System of Preferences (GSP) product petitions and industry aspects of country-practice petitions; TD legislative strategy; and analysis and support for the OECD Industry Committee. TIA coordinates DOC participation on the Committee on Foreign Investment in the United States (CFIUS), including implementation of the Exon-Florio provisions of the Omnibus Trade Act of 1988. TIA provides information to ITA, other areas in Commerce, and the entire USG trade community through a mixture of computer-based delivery systems, microfiche and printed materials. Computer-based information delivery is coordinated with the ITA office automation program. Microfiche and printed materials are maintained in the Trade Reference Room for the use of ITA analysts, staff from other Federal agencies, and the general public. Visitors exceed 8,000 annually. In addition, TIA is responsible for publishing the U.S. Industrial Outlook, Foreign Direct Investment Transactions in the United States, the U.S. Trade Performance annual report, and the U.S. International Direct Investment periodic report.

The U.S. Industrial Outlook is a critical mechanism of the International Trade Administration for the efficient delivery of information to three major users: (1) the private business community; (2) the Commerce Department and other agencies of the Federal Government; and (3) state and local governments. It is a unique source of the Department's full-spectrum analysis of domestic business and the international marketplace. The Outlook eliminates the need for a large number of narrow-focus publications, thereby making the most efficient use of both staff time and publishing dollars. TIA serves the entire U.S. Government community in developing and maintaining conveniently accessible, comprehensive data bases for analyzing U.S. and foreign trade trends in order to facilitate trade policy formulation, enforcement and other administration activities, and to support U.S. Government participation in multilateral and bilateral trade negotiations. This Trade Policy Information System (TPIS) is crucial for supporting USG participation in the Uruguay Round of multilateral trade negotiations under the auspices of the GATT.

Within the broad area of trade finance, TIA has responsibility for developing the Department's policy positions on international financial and monetary affairs. These responsibilities are carried out by doing research and analysis, coordinating with the regional and sectoral units affected, and by advancing Departmental positions at meetings where financial and monetary decisions are made. In the area of countertrade, TIA implements the mandate of the Omnibus Trade and Competitiveness Act of 1988 to monitor countertrade trends, organize and disseminate barter information and publish periodic lists of known commercial opportunities, notify Federal agencies of barter opportunities for Government-owned surplus commodities, and assist enterprises seeking barter and countertrade opportunities. TIA has a leading staff role in the interagency group on countertrade, mandated by the same Act, which is chaired by the Secretary. In the area of small business, TIA provides leadership and support to the small business community, dissemination of information on foreign sales corporations, and related activities to promote small business interests.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Evaluative, Analytical or Position Papers, and Reports	60	35	35
Major Reports on U.S. International Direct Investment	1	1	1
U.S. Industrial Outlook	1	1	1
State and Metropolitan Area Export Origin Report	1	1	1
Exon-Florio Reviews of Foreign Acquisitions of U.S. Companies	180	200	200
Speeches/Testimony/Talking Points	40	30	30
Annual Report on U.S. Trade Performance	1	1	1
Major Statistical Reports	7	2	2
Software Development For, and Maintenance of, Interagency Data Base	6	3	3

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Sectoral analysis	Pos./BA	376	26,904	373	26,711	(3)	(193)
	FTE/Obl.	366		363		(3)	

Uruguay Round - GATT (-3 FTE, -$193,000) - This decrease is requested in response to the anticipated completion of the Uruguay Round of GATT in 1990. While GATT related activities will continue, those ongoing activities will be handled by our remaining staff.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Trade Development**
Subactivity: **Sectoral Analysis**
Program Change: **Uruguay Round - GATT**

	Object Class	FY 1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	(121)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(121)
12.1	Civilian personnel benefits (26.25%)	(32)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(6)
22	Transportation of things	0
23.1	Rental payments to GSA	(12)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(5)
24	Printing and reproduction	(3)
25	Other services	(13)
26	Supplies and materials	(1)
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(193)

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Trade Development**
Subactivity: **Sectoral Analysis**
Program Change: **Uruguay Round - GATT**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Commodity Industry Specialist	13	(2)	$42,601	$(85,202)
International Economist	12	(1)	35,825	(35,825)
Total		(3)		(121,027)
Less Lapse (0.00%)		0		(0)
Total full-time permanent:		**(3)**		**(121,027)**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(3)
Other than full-time permanent	0
Total	(3)
Authorized Positions:	
Full-time permanent	(3)
Other than full-time permanent	0
Total	**(3)**

INCREASE FOR 1991
IEDS/National Trade Data Bank
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Trade information and analysis	Pos.\BA	116	7,530	117	7,660	1	130
	FTE\Obl.	100		101		1	

IEDS/National Trade Data Bank (+1 FTE, +$130,000) - This increase request is necessary to implement a large portion of the International Economic Data System (IEDS) required in Trade Act of 1988 provisions creating the National Trade Data Bank (NTDB). The increase will permit ITA to provide access, formatting, and delivery of various data (principally the Census U.S. merchandise trade tapes) from the interagency TradeNet data system (currently available through Compro) to the NTBD. ITA has been asked to supply the trade data from its Compro system since the data in the Compro system has already been edited down and verified, and is maintained to support corrections. In order to provide such data, ITA will write software to convert the Compro data to the data base format to be specified by EA. TIA will also be responsible for the monthly operating cost.

The increase is also required to provide analysts with access to software that will permit the data in the NTDB to be used effectively. In particular, prompting software needs to be developed that will permit analysts efficient access to a wide range of data compilations necessary to conduct trade policy analysis, export trend analysis, export and import price analysis, import penetration analysis, and other analytic functions. This software should facilitate the formatting of the data into formats consistent with widely used PC software -- e.g., Lotus spreadsheets and related methods.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: Trade Development
Subactivity: **Trade Information and Analysis**
Program Change: **IEDS/National Trade Data Bank**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	32
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	32
12.1	Civilian personnel benefits (26.25%)	8
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	7
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	2
24	Printing and reproduction	0
25	Other services	76
26	Supplies and materials	1
31	Equipment	3
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	130

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Trade Development**
Subactivity: **Trade Information and Analysis**
Program Change: **IEDS/National Trade Data Bank**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Computer Systems Analyst	13	1	$42,601	$42,601
Total		1		42,601
Less Lapse (25.00%)		0		(10,650)
Total full-time permanent:		1		**31,951**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	1
Other than full-time permanent	0
Total	1
Authorized Positions:	
Full-time permanent	1
Other than full-time permanent	0
Total	1

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Trade information and analysis	Pos.\BA	116	7,530	114	7,409	(2)	(121)
	FTE\Obl.	100		98		(2)	

Uruguay Round - GATT (-2 FTE, -$121,000) - This decrease is requested in response to the anticipated completion of the Uruguay Round of GATT in 1990. While GATT related activities will continue, those ongoing activities will be handled by our remaining staff.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Trade Development**
Subactivity: **Trade Information and Analysis**
Program Change: **Uruguay Round - GATT**

Object Class		FY 1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	(72)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(72)
12.1	Civilian personnel benefits (26.25%)	(18)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(8)
22	Transportation of things	0
23.1	Rental payments to GSA	(8)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(4)
24	Printing and reproduction	(5)
25	Other services	(6)
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(121)

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Trade Development**
Subactivity: **Trade Information and Analysis**
Program Change: **Uruguay Round - GATT**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
International Economist	13	(1)	$42,601	$(42,601)
International Economist	11	(1)	29,891	(29,891)
Total		(2)		(72,492)
Less Lapse (0.00%)		0		(0)
Total full-time permanent:		**(2)**		**(72,492)**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(2)
Other than full-time permanent	0
Total	(2)
Authorized Positions:	
Full-time permanent	(2)
Other than full-time permanent	0
Total	(2)

DECREASE FOR 1991
Eliminate Trade Adjustment Assistance
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Trade adjustment assistance	Pos.\BA	11	4,543	0	0	(11)	(4,543)
	FTE\Obl.	11		0		(11)	

Eliminate Trade Adjustment Assistance (-11 FTE, -$4,543,000) - ITA proposes to eliminate this program in 1991 for the following reasons:

- o The fact that a firm has been harmed by import competition should not, per se, constitute justification for special Governement assistance. Such special treatment is unfair to firms that have been harmed by domestic competition, or other market-based factors.

- o U.S. trade laws provide remedies against unfair import competition. TAA is available to firms even if the import competition was fair -- i.e., not subsidized or dumped.

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Department of Commerce
International Trade Administration
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PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Trade Development**
Subactivity: **Trade Adjustment Assistance**
Program Change: **Eliminate Trade Adjustment Assistance**

Object Class		FY 1991 **Decrease**
11	Personnel compensation	
11.1	Full-time permanent	(657)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(657)
12.1	Civilian personnel benefits (12.64%)	(83)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(50)
22	Transportation of things	0
23.1	Rental payments to GSA	(130)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(40)
24	Printing and reproduction	(10)
25	Other services	(200)
26	Supplies and materials	(20)
31	Equipment	(10)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	(3,343)
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(4,543)

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM AND PERFORMANCE:DIRECT OBLIGATIONS
(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**	**Pers.**	**Amount**
International Economic Policy											
Management and policy coordination	Pos./BA	44	3,294	48	3,320	48	3,507	42	3,174	(6)	(333)
	FTE/Obl.	46	3,333	46	3,437	47		41		(6)	
Regional economic policy	Pos./BA	180	13,026	219	13,663	219	14,493	215	14,499	(4)	6
	FTE/Obl.	190	14,083	208	14,193	212		208		(4)	
Total	**Pos./BA**	**224**	**16,320**	**267**	**16,983**	**267**	**18,000**	**257**	**17,673**	**(10)**	**(327)**
	FTE/Obl.	**236**	**17,416**	**254**	**17,630**	**259**		**249**		**(10)**	

Department of Commerce
International Trade Administration
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PROGRAM AND PERFORMANCE:REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
International Economic Policy											
Management and policy coordination	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Regional economic policy	FTE/Obl.	0	110	0	126	0	117	0	117	0	0
Total	**FTE/Obl.**	**0**	**110**	**0**	**126**	**0**	**117**	**0**	**117**	**0**	**0**

JUSTIFICATION OF PROGRAM AND PERFORMANCE FOR
INTERNATIONAL ECONOMIC POLICY

Goals and Objectives for FY 1991

Goals: The goals of this subactivity are to increase America's competitiveness in the world economy and safeguard the national interest through effective administration of U.S. trade laws.

Objectives: International Economic Policy (IEP) will achieve these goals by expanding foreign markets by removing barriers to travel, trade and investment, increasing U.S. exports of goods and services, and taking prompt, aggressive action against unfair trade practices. Through its management and policy coordination and regional economic policy programs, IEP:

- advises on the formulation and implementation of U.S. Government international trade, commercial and investment policies from a country-specific or multilateral perspective;
- supports Multilateral Trade Negotiations (MTN) and implements MTN agreements to provide U.S. industry access to foreign markets;
- supports an active program of outreach on MTN negotiations and agreements to educate the general public and solicit industry advice;
- implements current trade laws and develops positions on proposed domestic trade legislation;
- protects and advances U.S. commercial interests by identifying and resolving bilateral economic problems which threaten U.S. economic activity;
- identifies future bilateral, multilateral and regional trade, commercial and investment problems and formulates solutions;
- analyzes and disseminates country information;
- supports an active program of overseas promotional events to assist U.S. firms in increasing exports;
- contributes to effective management of the foreign operations by overseeing, with U.S. and Foreign Commercial Service management, policy and program activities of the senior foreign commercial officers; and
- provides business counseling service to U.S. exporters on marketing questions.

To meet its goals, IEP develops international trade and investment policy to address trade barriers, conducts outreach programs to promote U.S. exports and monitors foreign compliance with U.S. trade laws and international agreements, seeking remedial actions when foreign violations occur.

Base Program

Management and policy coordination -- This program develops and implements policies related to international trade and investment issues by coordinating the activities undertaken by the regional economic policy element of IEP and providing policy analysis, development, and representational capability for those issues which are cross-cutting in nature (e.g., competitiveness, science and technology agreements).

In addition, it provides a central management function for IEP through the Assistant Secretary and the Deputy Assistant Secretary for International Economic Policy, develops uniform policies for supervising program activities of foreign operations, and initiates and supervises analyses and policy papers on issues of cross-cutting concern. Staff assigned to the multilateral affairs function coordinate the development of non-sectoral trade and investment policy issues which arise in a multilateral context, including international fora such as the General Agreement on Tariffs and Trade (GATT), the Organization for Economic Cooperation and Development (OECD), and the specialized agencies of the United Nations. In support of ITA's subgoal to expand overseas markets by removing trade and investment barriers, the program develops U.S. negotiating positions for and participates in the Uruguay Round of Multilateral Trade Negotiations under the GATT (launched in September 1986), OECD trade and investment issues such as counter trade, trade-related investment measures, and U.S. issues such as the Code of Conduct for multinational corporations; monitors and implements the Multilateral Trade Agreements in the GATT, including the codes on product standards, government procurement, customs valuations, and import licensing; coordinates ITA efforts to resolve international trade disputes arising under these codes through the GATT mechanism; prepares and reviews papers and participates in interagency and international meetings on GATT, OECD, and UN issues; and undertakes policy analyses of issues related to these international organizations. This program plays an important role in development of Administration positions on proposed trade legislation and in the implementation of current U.S. trade law including section 301 cases and the renewed Generalized System of Preferences program for developing countries, as authorized by the Trade and Tariff Act of 1984, and with technical assistance from the Patent and Trademark Office, provides coordination of intellectual property issues and bilateral science and technology agreements.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Primary Policy Support			
Briefing papers prepared	1,009	1,020	880
Speeches, testimony prepared	98	100	89
Interagency meetings attended	894	912	790
Commissions, bilateral meetings attended	320	324	285
Primary Private Sector Outreach			
Events supported	5	5	3
Special publications prepared	10	12	11
Magazine/periodical articles written	15	15	13
Seminars organized	18	20	15
Speeches delivered	54	55	51
Business counseling sessions	865	1,050	805

Regional economic policy -- This program develops and implements policies in support of expanding foreign markets by removing barriers to travel, trade and investment, increasing U.S. exports of goods and services, and taking prompt, aggressive action against unfair trade practices. After evaluating U.S. business and consumer interests, policy recommendations are developed; and U.S. trade, investment and commercial policies and programs are formulated and implemented in the interagency system with primary implementation responsibility lodged in Commerce. Remedial action is taken to maintain the original balance of concessions to the U.S. in previous agreements, and action which is responsive to U.S. objectives and to foreign government initiatives is taken through bilateral negotiations. The regional economic policy program also provides for a continuous study of foreign countries and regional groupings to develop and maintain an in-depth knowledge of the structures, problems, workings, and directions of their economies as they affect U.S. economic interests. IEP country desk officers identify short- and long-term foreign developments and measures which affect U.S. commercial relations with countries and regional economic groupings. This information and analysis is made available to U.S. exporters through regular and special publications and extensive business counseling, which are designed to assist small- and medium-sized and new-to-market firms in particular. Additional program responsibilities include participation in the interagency formulation of policy guidance for consultations and representations with regional groups such as the European Community (EC) and the European Free Trade Area.

As a part of this policy development and implementation process, IEP regional managers (Deputy Assistant Secretaries) supervise policy and program activities of Senior Foreign Commercial Officers. Specific supervisory responsibilities include: day-to-day contact between the country desks and the Foreign Commercial Officers on a worldwide basis; knowledge of post activities; and oversight of Senior Foreign Commercial Officers' activities related to program implementation. The country desk officer and the foreign commercial post coordinate resources to produce reports, make representations, and implement trade promotion activities. In addition, this program has responsibility for participating in the development and management of Country Marketing Plans (CMP) for 122 foreign commercial posts in conjunction with ITA units and other Federal agencies. Through the CMP, the regional Deputy Assistant Secretary participates in the country goal-setting process for each foreign commercial post and participates with the Director General of the U.S. and Foreign Commercial Service in evaluating Senior Foreign Commercial Officer (SFCO) performance against these goals. Through these activities, IEP plays an active role in export promotion and contributes to the effectiveness of ITA-wide efforts to remove foreign trade and investment barriers.

Country desk officers provide policy analysis and policy recommendations to government officials. The policy analysis aspect of this program examines general economic data such as market growth rates, import/export trends, and tariff and non-tariff and investment barriers affecting U.S. sales, economic development plans, likely host government and private sector purchasing patterns, distribution channels and credit practices, and the competitive position of our leading foreign trading partners. Plans are prepared to reduce barriers to U.S. market access in countries of greatest U.S. export potential. This program also identifies and maintains information concerning the activities of individual foreign companies and host government decisions affecting the marketing opportunities of individual American suppliers. Information is assembled from a wide range of sources including diplomatic and intelligence reports, private and government publications, official and business travelers, and ITA's foreign market research program. This information provides a data source which enables the country specialist to develop comprehensive analysis and recommendations for senior policy officials and to contribute to the preparation of the annual National Trade Estimates report mandated in the Omnibus Trade Act of 1988.

As a corollary to this effort, country desk officers perform a variety of functions designed to assist the U.S. business community to enter world markets or expand sales in existing markets. Drawing upon their expertise in foreign trade and investment policies and practices, country specialists are responsible for contributing to program recommendations and participating in the development of ITA's overseas trade promotion activities, including designation of markets as appropriate for special emphasis. Also, country desk officers develop comprehensive plans for major overseas trade exhibitions, trade missions, and catalog shows. In addition, country desk officers provide economic and commercial background information on their countries to other government agencies and Congressional committees and staff. Where appropriate, country desk officers publish commercial and marketing information useful to the private sector. Often the private sector provides information to the country desk officers pertinent to policy questions or to injurious foreign country practices. On the basis of such information, the country desk officer formulates policy initiatives and makes recommendations for appropriate governmental actions aimed at advancing U.S. policy interests or redressing grievances.

Regional economic policy units devote considerable resources (approximately 40 percent) to business outreach programs. A significant portion of the efforts is business counseling, where country desk officers respond to specific questions involving such critical programs as the European Community 1992, the U.S.-Canada Free Trade Agreement, and special marketing initiatives in Japan, Korea, Taiwan and Mexico.

Regarding our efforts with Korea and Taiwan, IEP actively supports several buying missions to the United States from those countries. In addition, IEP continues to participate in seminars throughout the United States on "Doing Business in Korea/Taiwan."

The program also supports implementation of MTN tariff and non-tariff agreements, and investigation of unfair foreign trade practices through monitoring and analysis of individual foreign government policies and practices, and develops information concerning foreign government practices affecting MTN commitments; provides data, analysis and policy recommendations for use in the GATT Uruguay Round of multilateral trade negotiations, and comprehensive bilateral free trade and investment negotiations with key trading partners (e.g., Canada and Mexico); and provides secretariat support for bilateral commissions on trade and commercial relations for which the Department is responsible. These commissions are jointly chaired by senior U.S. and foreign government officials and provide fora for the discussion, negotiation and resolution of bilateral trade and commercial problems. High-level trade and investment missions are also organized and staffed on a periodic basis which offer exceptional exposure and opportunities to U.S. companies. Additionally the program works to eliminate access barriers to the Japanese market for U.S. goods and services through participation in market-oriented, sector-selective (MOSS) talks and other bilateral negotiating mechanisms, and to assist U.S. industry in increasing its export performance in Japan; and prepares briefing materials and coordinates with other agencies and foreign governments for the Secretary's involvement in joint economic commissions and ministerial consultations.

In January 1989, the FTA Binational Secretariat was created by the U.S.-Canada Free Trade Agreement (FTA) to administer panel review procedures to settle disputes arising under the FTA. The Secretariat has U.S. and Canadian Sections which act as "mirror-images" of each other to administer the dispute settlement process. The Secretariat administers a panel review procedure which offers an alternative process to the Court of International Trade in U.S. cases, and provides for a new appeal process in Canadian cases, for review of antidumping and countervailing duty final determinations, administrative reviews, and scope determinations by the U.S. Import Administration and the Canadian International Trade Tribunal and injury determinations in antidumping and countervailing duty cases by the U.S. International Trade Commission and Revenue Canada.

In 1980 the National Center for Industrial Science and Technology Management Development, Dalian, China (Dalian Center) was established under the Department of Commerce-People's Republic of China (PRC) Protocol on Cooperation in Management of Science and Technology (which falls under the U.S.-China Science and Technology Agreement). Through the Center, the Department provides management training to PRC enterprise managers, R&D administrators, government officials, and university professors. The program has had a long-term positive impact on U.S.-China relations with substantial benefits accruing to both sides, and is considered the premier example of a U.S.-PRC cooperative program. The Dalian Center promotes pro-U.S. attitudes among current and future leaders in the Chinese government, industry and education. It enhances opportunities for U.S. exports to China since graduates become leading decision makers in PRC organizations, purchasing equipment and technology from abroad. The Center also serves as a window for the U.S. to gain insights into the Chinese economy. A Protocol renewing the program for five years has been concluded.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Primary Policy Support			
Briefing papers prepared	2,649	2,850	3,053
Speeches, testimony prepared	567	615	664
Interagency meetings attended	2,805	3,025	3,111
Commissions, bilateral meetings attended	448	482	508
Primary Private Sector Outreach			
Events supported	544	579	663
Special publications prepared	305	331	359
Magazine/periodical articles written	448	478	551
Seminars organized	218	267	301
Speeches delivered	551	620	734
Business counseling sessions			
Telephone calls	139,560	152,161	193,804
Visitors	11,637	12,525	13,165

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Management and Policy Coordination	Pos./BA	48	3,507	42	3,174	(6)	(333)
	FTE/Obl.	47		41		(6)	

Uruguay Round - GATT (-6 FTE, -$333,000) - ITA is requesting a decrease of 6 FTE and $333,000 to reflect projected completion of negotiations in 1990 of the General Agreement on Tariffs and Trade (GATT) Uruguay Round.

IEP remains the focal point for Departmental substantive and procedural policy development and coordination in the Uruguay Round with multiple responsibilities. Ongoing activities, resulting from Uruguay Round decisions, will continue to be performed by our remaining staff.

Performance Measures:

	1991	1992	1993	1994	1995
Primary Policy Support					
Briefing papers prepared	(160)	(480)	(480)	(480)	(480)
Speeches, Testimony prepared	(16)	(48)	(48)	(48)	(48)
Interagency meetings attended	(140)	(420)	(420)	(420)	(420)
Commissions, bilateral meetings attended	(50)	(150)	(150)	(150)	(150)
Primary Private Sector Outreach					
Events supported	(1)	(2)	(2)	(2)	(2)
Special publications prepared	(1)	(5)	(5)	(5)	(5)
Magazine/periodical articles written	(2)	(7)	(7)	(7)	(7)
Seminars organized	(3)	(8)	(8)	(8)	(8)
Speeches delivered	(9)	(26)	(26)	(26)	(26)
Business counseling sessions	(140)	(420)	(420)	(420)	(420)

The personnel and object class detail for this decrease follow:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **International Economic Policy**
Subactivity: **Management and Policy Coordination**
Program Change: **Uruguay Round - GATT**

Object Class		FY 1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	(179)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(179)
12.1	Civilian personnel benefits	(45)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(55)
22	Transportation of things	0
23.1	Rental payments to GSA	(24)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(11)
24	Printing and reproduction	0
25	Other services	(19)
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	**(333)**

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **International Economic Policy**
Subactivity: **Management and Policy Coordination**
Program Change: **Uruguay Round - GATT**

Title:	Grade	Number	Annual Salary	Total Salaries
International Economist	13	(1)	$42,601	($42,601)
International Economist	12	(1)	35,825	(35,825)
International Trade Specialist	11	(2)	29,891	(59,782)
International Trade Specialist	9	(1)	24,705	(24,705)
Clerk-Typist	4	(1)	16,517	(16,517)
Total		(6)		(179,430)
Less Lapse (0.00%)		(0)		(0)
Total full-time permanent:		**(6)**		**(179,430)**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(6)
Other than full-time permanent	0
Total	**(6)**
Authorized Positions:	
Full-time permanent	(6)
Other than full-time permanent	0
Total	**(6)**

INCREASE FOR 1991
Economic Restructuring in Eastern Europe and USSR
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Regional economic policy	Pos./BA	219	14,493	219	14,593	0	100
	FTE/Obl.	212		212		0	

Economic Restructuring in Eastern Europe and USSR (0 FTE, +$100,000) - This request will enable IEP to respond effectively to the surge of interest by U.S. firms in expanded trade with the USSR and Eastern Europe and to meet the challenge of increased Western competition in the region. Increased U.S. corporate interest stems from the reform process (Perestroika) currently underway in the USSR and much of Eastern Europe. We are confident that with our help this new interest and market reform can be turned into substantially increased U.S. exports to, and investment in, the USSR and Eastern Europe.

Thanks to the fast-paced political and economic reform process, the region is becoming increasingly market-oriented. The President visited Poland and Hungary in July to encourage further reform in those countries. Since then, Czechoslovakia, East Germany, and Bulgaria have adopted far-reaching reforms, stimulating new interest in the business community in trade and investment in the region.

In addition, the President has suggested that it may soon be possible to extend a waiver under the Jackson-Vanik Amendment for the Soviet Union, opening the way for a bilateral trade agreement, reciprocal extension of Most-Favored-Nation (MFN) trade status, and possible access to Eximbank financing. This would constitute a radical improvement in the U.S.-Soviet trade relationship, permitting private companies and the U.S. Government to take advantage quickly of opportunities which will shape U.S.-Soviet trade for years to come.

Without expansion of our publications program and more staff travel in the region, we cannot keep up with the substantial increase in business activity in the USSR and Eastern Europe (both current and projected) and properly serve American firms involved or interested in these markets.

With the additional funding, the Office of Eastern Europe and Soviet Affairs (OEESA) will undertake an enhanced publications program to include the following: Overseas Business Reports (OBRs) on how to do business in the USSR and Eastern Europe (current such OBRs are 8-10 years old and largely useless); investment and countertrade guides (new publications); expanded information services (currently limited to fact sheets); and Foreign Economic Trends Reports on a more frequent basis. These added publications will significantly expand our informational outreach and will be especially effective in attracting new business to these markets.

Also, we will publish an analysis of the effect of MFN on U.S. imports from the Soviet Union and U.S. exports to the Soviet Union, a copy of the trade agreement along with an analysis of its practical consequences for business procedures and opportunities, a new analysis of the Soviet market, as well as new advice for doing business in the USSR for the companies seeking to enter the Soviet market for the first time as a result of the trade agreement. In addition, we will publish an analysis of joint ventures concluded after three years along with advice on negotiating and operating a joint venture.

If the President extends a Jackson-Vanik waiver to the Soviet Union, we will use the increased funding to pay for travel for negotiation of a trade agreement, for overseeing implementation of the agreement after its conclusion, and for speeches to conferences for companies who want to take advantage of the change in the Soviet market.

Increased funding also will permit staff travel in support of enhanced trade promotion and business development activities in the region that we are currently unable to undertake. The additional funding will allow us to improve prospects for increased private sector activity through greater involvement in Business Council meetings/programs both in the U.S. and abroad. Specifically, we can then participate actively in all meetings and activities of the U.S.-USSR Trade and Economic Council (USTEC), as well as the six East European Business Councils.

Similarly, increased funding will permit us to use Joint Economic Commission programs and activities to support greater private sector activity, particularly in the Soviet Union. For example, we will fund trips for participation in the twenty meetings per year of the five industry sector groups organized under the U.S.-USSR Joint Commercial Commission (JCC), as well as the three to eight additional trade promotion, business facilitation and other events which the JCC is likely to establish.

In order to develop on-the-spot market information and keep current with new legislation and procedures in this fast changing commercial environment, the increased funding will augment our efforts to ensure that U.S. firms and U.S. Government take advantage of opportunities in the USSR and Eastern Europe.

Performance Measures:

	1991	1992	1993	1994	1995
Trips for meetings to Eastern Europe, USSR, and domestic	25	25	26	26	26
Events supported	15	15	16	16	16
Publications	16	18	19	21	23
Business counseling sessions	3,640	3,712	3,720	3,730	3,742

The object class detail for this increase follows:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **International Economic Policy**
Subactivity: **Regional Economic Policy**
Program Change: **Economic Restructuring in Eastern Europe and USSR**

Object Class		FY 1991 Increase
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits (26.25%)	0
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	40
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	37
25	Other services	7
26	Supplies and materials	6
31	Equipment	10
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	100

INCREASE FOR 1991
European Community 1992
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Regional economic policy	Pos./BA	219	14,493	219	14,647	0	154
	FTE/Obl.	212		212		0	

European Community (EC) 1992 (0 FTE, +$154,000) - As part of a concerted ITA action, this request will enable International Economic Policy (IEP)/Europe to intensify and broaden its outreach activities to ensure that small-to mid-sized U.S. firms will be in a position to take advantage of the increased export potentials generated by the 12-country European Community becoming a single integrated market by the end of 1992. The EC's market consolidation program will drastically change the way business is conducted in the 12 member countries. If U.S. firms are not informed and educated on these changes, our export promotion efforts will be greatly hindered.

The goals of the EC 1992 Outreach Program are to:

- Implement the EC 1992 publications program-- writing and printing a series of 10-20 "How To Do It" publications aimed at helping the smaller U.S. company expand business in the European Community, i.e. "How to Improve Your Distribution Structure in EC 1992";
- Expand the outreach program to reach 25,000 U.S. companies interested in opportunities in the EC 1992 program;
- Support several specialized outreach and problem resolution initiatives on standards, testing, and certification regarding the 1992 program. By the completion of the 1992 program, it has been estimated that 80 percent of the regulations affecting doing business in Europe will be EC originated and only 20 percent will be national. We must be able to initiate analyses of the impact on U.S. exports of all these changes;
- Develop a comprehensive trade barrier impact analysis and trade action program in support of our export counseling activity. Although the EC is claiming that the 1992 program will not impose barriers to the importation of American products, we need to conduct our own study on the ramifications for U.S. exports; and
- Expand the EUROPE NOW program, providing more extensive export counseling to new-to-market firms to exploit enhanced export opportunities in Europe. Our EUROPE NOW Program has demonstrated that interested firms, through intensive counseling, can become active exporters throughout Europe. This experience indicates that 40 percent of the small- to mid-size firms that we work closely with will, on average, generate $250,000 per company in annual export sales

FY 1991 will be the right time to make a major U.S. wide outreach effort just before implementation of EC's Single Integrated Market Program. This will be an excellent window of opportunity for U.S. firms to prepare for the expected increased competition from European firms. If U.S. firms are not fully informed on the developments of doing business in the new EC single Market, their export sales to Europe will be in jeopardy.

Performance Measures:

	1991	1992	1993	1994	1995
Speeches delivered	30	35	0	0	0
Events supported	35	40	0	0	0
Magazine/periodical articles written	40	50	0	0	0
Special publications prepared	20	10	0	0	0
Business counseling sessions	25,000	30,000	0	0	0

The object class detail for this increase follows:

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: **International Economic Policy**
Subactivity: **Regional Economic Policy**
Program Change: **European Community 1992**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits (26.25%)	0
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	50
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	50
25	Other services	34
26	Supplies and materials	10
31	Equipment	10
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	154

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Regional economic policy	Pos./BA	219	14,493	215	14,285	(4)	(208)
	FTE/Obl.	212		208		(4)	

Uruguay Round - GATT (-4 FTE, -$208,000) - ITA is requesting a decrease of 4 FTE and $208,000 to reflect projected completion of negotiations in 1990 of the General Agreement on Tariffs and Trade (GATT) Uruguay Round.

IEP remains the focal point for Departmental substantive and procedural policy development and coordination in the Uruguay Round with regional clusters in IEP providing necessary country-specific analytical and policy development advice. Ongoing activities, resulting from Uruguay Round decisions, will be carried out by our remaining staff.

Performance Measures:	1991	1992	1993	1994	1995
Primary Policy Support					
Briefing papers prepared	(85)	(170)	(170)	(170)	(170)
Speeches, testimony prepared	(18)	(36)	(36)	(36)	(36)
Interagency meetings attended	(86)	(172)	(172)	(172)	(172)
Commissions, bilateral meetings attended	(14)	(28)	(28)	(28)	(28)
Primary Private Sector Outreach					
Events supported	(0)	(1)	(1)	(1)	(1)
Special publications prepared	(1)	(4)	(4)	(4)	(4)
Magazine/periodical articles written	(1)	(4)	(4)	(4)	(4)
Seminars organized	(2)	(5)	(5)	(5)	(5)
Speeched delivered	(6)	(10)	(10)	(10)	(10)
Business counseling sessions (visitors)	(94)	(188)	(188)	(188)	(188)

The personnel and object class detail for this decrease follow:

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: International Economic Policy
Subactivity: **Regional Economic Policy**
Program Change: **Uruguay Round - GATT**

Object Class		**FY 1991 Decrease**
11	Personnel compensation	
11.1	Full-time permanent	(120)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(120)
12.1	Civilian personnel benefits	(32)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(13)
22	Transportation of things	0
23.1	Rental payments to GSA	(16)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(7)
24	Printing and reproduction	(3)
25	Other services	(17)
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(208)

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **International Economic Policy**
Subactivity: **Regional Economic Policy**
Program Change: **Uruguay Round - GATT**

Title:	Grade	Number	Annual Salary	Total Salaries
International Trade Specialist	12	(1)	$35,825	($35,825)
International Trade Specialist	11	(2)	29,891	(59,782)
International Trade Specialist	9	(1)	24,705	(24,705)
Total		(4)		(120,312)
Less Lapse (0.00%)		(0)		(0)
Total full-time permanent:		(4)		(120,312)

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(4)
Other than full-time permanent	0
Total	(4)
Authorized Positions:	
Full-time permanent	(4)
Other than full-time permanent	0
Total	(4)

DECREASE FOR 1991
Canada FTA Secretariat
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Regional economic policy	Pos./BA	219	14,493	219	14,453	0	(40)
	FTE/Obl.	212		212		0	

Canada FTA Secretariat (0 FTE, -$40,000) - ITA is requesting a decrease of 0 FTE and $40,000 to reflect a more accurate estimate of FY 1991 needs in light of last year's Congressional decision to provide $500,000 for Chapter 18 panels under the U.S.-Canada Free Trade Agreement.

The object class detail for this decrease follows:

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Activity: **International Economic Policy**
Subactivity: **Regional Economic Policy**
Program Change: **Canada FTA Secretariat**

Object Class		FY 1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	(40)
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(40)

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM AND PERFORMANCE:DIRECT OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Import Administration											
Import Administration	Pos./BA	230	19,258	326	19,450	326	20,637	372	23,270	46	2,633
	FTE/Obl.	257	18,603	296	20,198	303		337		34	
Special import programs	Pos./BA	15	918	16	928	16	991	20	1,151	4	160
	FTE/Obl.	15	900	16	968	18		21		3	
Total	**Pos./BA**	**245**	**20,176**	**342**	**20,378**	**342**	**21,628**	**392**	**24,421**	**50**	**2,793**
	FTE/Obl.	**272**	**19,503**	**312**	**21,166**	**321**		**358**		**37**	

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM AND PERFORMANCE:REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
Import Administration											
Import Administration	FTE/Obl.	1	87	1	100	1	94	1	94	0	0
Special import programs	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Total	**FTE/Obl.**	**1**	**87**	**1**	**100**	**1**	**94**	**1**	**94**	**0**	**0**

JUSTIFICATION OF PROGRAM AND PERFORMANCE FOR
IMPORT ADMINISTRATION

Goals and Objectives for FY 1991

Goal: The goal of this subactivity is to improve American competitiveness through effective administration of U.S. trade laws and enforcing sector-specific trade agreements that govern U.S. imports.

Objectives: ITA will achieve this Department of Commerce (DOC) goal by taking prompt, aggressive action against unfair trade practices and by administering and enforcing U.S. trade laws and those agreements that have been negotiated to address sector-specific trade distorting practices. The objectives of this activity are to conduct antidumping (AD) and countervailing duty (CVD) investigations and administrative reviews within statutory time limits; to monitor and enforce bilateral steel and machine tool voluntary restraint arrangements as part of the President's Programs for Steel and Machine Tools; to administer the U.S.-Japan Semiconductor Agreement and the U.S.-Canada Memorandum of Understanding on Softwood Lumber; to administer Foreign Trade Zones; and to manage and support special import programs.

Base Program - FY 1991

Import Administration -- IA defends American Industry against injurious and unfair trade practices by administering efficiently, fairly, and in a manner consistent with U.S. international obligations: the Antidumping and Countervailing Duty (AD/CVD) laws of the United States; the U.S.- European Economic Community Arrangement and 19 other steel trade arrangements under the President's policy for the steel industry; the machine tool arrangements with Japan and Taiwan under the President's Machine Tool Program; the U.S.-Japan Semiconductor Agreement; and the U.S.-Canada Memorandum of Understanding on Softwood Lumber. IA plays a leading role in our government's efforts to improve functioning of the GATT dumping code.

The major objectives of this subactivity are to process and complete investigations and administrative reviews within the statutory time limits of the trade laws and implement the requirements of the Omnibus Trade and Competitiveness Act of 1988 (the Trade Act of 1988). This program is comprised of four principal program areas: AD/CVD Investigations; AD/CVD Compliance; AD/CVD Policy; and AD/CVD Accounting. They administer the AD/CVD laws, as intended by statute, in a manner consistent with overall U.S. trade policy and international obligations.

The Deputy Assistant Secretary (DAS) for Investigations is responsible for the conduct of investigations in cases where there is reason to believe that imports are being subsidized or being sold in the United States at less than fair value. Affirmative determinations, supported by injury determinations made by the International Trade Commission, can result in AD/CVD assessments which are then collected by the Customs Service. This program is the primary contact for petitioners.

Once an investigation has been completed and an AD/CVD order issued or suspension agreement accepted, the Deputy Assistant Secretary for Compliance is responsible for the monitoring and administrative review of the order or agreement.

- **Investigations:** The Offices of Antidumping Investigations and Countervailing Investigations are charged with conducting the initial investigation under the AD/CVD laws where there is reason to believe that imports are being unfairly subsidized or sold in the U.S. at less than fair value. Each investigation must be completed within strict statutory deadlines, and the investigations vary widely in terms of scope and complexity. In each investigation staff must: (1) analyze information provided by the petitioning U.S. industry to determine whether an investigation should be initiated; (2) prepare extensive questionnaires which are to be answered by the relevant foreign government and/or industry and which seek information about the manufacture and importation of the foreign-made goods under investigation; (3) analyze responses to the questionnaires and verify such responses on-site in the foreign country at the relevant government and/or industry offices; (4) calculate estimated subsidy or dumping margins; and (5) prepare preliminary and final determinations, including Federal Register notice that explains each determination. When the results of a final determination are challenged in the Court of International Trade, the DAS for Investigations provides support to the Deputy Chief Counsel for IA and the Justice Department. If a case is remanded to IA by the Court of International Trade, the investigation is re-conducted in accordance with the Court's instructions.

  In addition, these offices are required to counsel U.S. industries that are considering filing dumping or countervailing duty petitions. This requires Investigations staff to meet with industry representatives in Washington or at the industry's offices or factories; educate the industry representatives to the requirements of the AD/CVD laws; review information provided by the industry; and advise whether additional information would be necessary to authorize the initiation of an investigation. When the Department is considering self-initiation of an investigation, these offices are required to conduct an in-depth pre-initiation investigation and to convey the results of that investigation, in a memorandum to both the Deputy Assistant Secretary and the Assistant Secretary for Import Administration that recommends whether an investigation should be self-initiated. Staff is also required, in each investigation, to monitor and control the dissemination of business proprietary information to counsel for parties through the issuance of administrative protective orders. Finally, Investigations staff drafts responses to allegations that the AD/CVD laws have been violated and inquiries regarding on-going and potential AD/CVD Investigations for Departmental officials and Congress.

- **Compliance:** Compliance conducts requested administrative reviews of AD/CVD orders and findings in order to determine first, the estimated AD/CVD duties deposited when merchandise covered by an AD/CVD order is imported, and second, the final amount of the duties to be paid. Compliance also conducts requested administrative reviews of suspended investigations to determine compliance, or lack there of, with the agreements forming the basis of the suspension. These reviews require Compliance to obtain and verify detailed subsidy, price, and cost of production information. This entails considerable foreign and domestic travel for on-site verification. The administrative review process involves the same tasks as described for the Investigatory process, namely: preparation and presentation of questionnaires; analysis of formal written and oral comments on the preliminary results; preparation and publication of final results; and provision of instructions to the Customs Service. When the results of administrative reviews are challenged in the Court of International Trade (which has been occurring with increasing frequency), Compliance provides support to the Chief Counsel for Import Administration and the Justice Department. If the case is remanded by the court, any portion or portions of the review process may have to be repeated.

  The workload of this program is constantly expanding because AD and CVD orders are usually in effect for several years. In addition an increasing amount of Compliance's time and resources is devoted to collateral activities, such as: scope inquiries (which require their own timetables and administrative records); investigations of possible circumvention; import monitoring (TVs, Steel, Photo Albums); and, litigation assistance.

Compliance is also responsible for two semiconductor programs, the U.S.-Japan Arrangement on Trade in Semiconductors (Arrangement) and the antidumping suspensions agreements on EPROMs and 256K (and above) DRAMs from Japan. The total value of semiconductor trade being monitored by the two programs is approximately $4.5 billion dollars per year. The Secretary of Commerce and the U.S. Trade Representative (USTR) are responsible for ensuring that the objectives of the Arrangement are being met. Compliance monitors and prepares reports on Japanese compliance with the terms of the Arrangement, enabling the Secretary to fulfill this function. Using cost of production and sales price data available from a variety of sources and independently developed, the semiconductor program monitors worldwide sales of Japanese produced semiconductors covered by the Arrangement.

The Arrangement provides that formal consultations will be held at least two times a year, with the opportunity for emergency consultations to be held at the request of either government. Consultations have been held much more frequently due to negotiations regarding the sanctions and product-specific issues. The Semiconductor Program staff prepares briefing material, drafts testimony and speeches, responds to product coverage questions and answers special correspondence with various special interest groups.

The antidumping suspension agreements on EPROMs and 256K (and above) DRAMs require quarterly calculations of the price at or above which the Japanese signatories can sell their products in the United States without violating U.S. antidumping law. Compliance calculates over 800 of these prices, called foreign market values (FMVs), every quarter based on company-specific, product-specific, cost of production information. Verifications are conducted quarterly to ensure accuracy of cost data and the signatory's compliance with the FMVs.

In December, 1986, the United States and the Canadian governments signed a Memorandum of Understanding (MOU) covering $3 billion in trade in softwood lumber products which Compliance enforces. The MOU addresses the U.S. lumber industry's concerns of the unfair government subsidization of the Canadian lumber industry and provides that the Canadian government impose an export charge on certain softwood lumber products and hold regularly scheduled consultations with U.S. officials on all aspects of the MOU. President Reagan directed the Secretary of Commerce to determine whether the terms of the MOU are being fulfilled. Compliance is the coordinating body for implementing the MOU and its lumber program is responsible for monitoring adherence to the agreement, which will remain in force indefinitely. In addition, through the lumber program, IA staff monitors changes in Canadian provincial forest policies. Provinces may eliminate past unfair trade practices, enabling them to reduce or eliminate the export tax on their lumber shipments.

The Office of Agreements Compliance monitors and enforces bilateral steel trade arrangements with foreign governments. These include the two steel arrangements negotiated with the European Community as well as 16 additional arrangements. This program was begun by President Reagan in 1984 and extended by President Bush for two and one half years. President Bush has stated that one of the key policy goals of his Administration will be to achieve an international consensus on elimination of unfair trading practices involving steel. The office monitors and enforces seven bilateral international consensus agreements on the elimination of unfair trade in the steel sector, covering 18 countries. This office is also responsible for monitoring and enforcing the bilateral arrangements on machine tools with Japan and Taiwan negotiated in 1986 under President Reagan's Machine Tool Program. The machine tool VRAs were proposed by the President as a result of the impact of machine tool imports on national security. This program will extend over a five-year period ending on January 1, 1992.

The steel and machine tool Arrangements require the Department to monitor total import levels, monitor diversion among product lines, prevent illegal transshipment through third countries, and prevent transactions involving fraudulent evasion of Arrangement restrictions. To accomplish this, each importation of a licensed steel product or machine tool is monitored and analyzed using several documents including: a Special Steel Summary Invoice (SSSI); an official export certificate, specific data collected for the Census Bureau by U.S. Customs; and other documents submitted by importers. All other steel and machine tool import transactions are monitored and analyzed using SSSI and entry-specific Census data. Effective enforcement of the arrangements also requires the Department to monitor imports from non-arrangement countries to prevent transshipment.

The Office of Agreements Compliance processes invoices and data obtained from Customs and Census for every steel and machine tool entry. In 1988, over 160,000 export certificates and licenses were processed.

Arrangements signed to date require quarterly formal consultations as well as ad hoc consultations under anti-shift provisions or "any other matter arising out of the operation of the arrangement." To accommodate domestic consumers of steel, all arrangements also provide that the U.S. may authorize the issue of additional, ex-quota licenses in cases where it determines that a product is not available in sufficient quantities from U.S. suppliers. These licenses are granted after a careful investigation of potential U.S. sources for the consumer requesting an exemption on the basis of short supply. Notice of each request for a short supply review is published in the Federal Register in order to give interested parties an opportunity to comment.

- **Office of Policy:** This office provides advice on all active investigations and administrative reviews to assure that AD/CVD cases are being handled and decided uniformly, expeditiously and consistently with requirements of U.S. Government law, overall trade policies, and the international obligations of the United States. This is accomplished through a review of current cases for policy guidance based on current interpretations of AD/CVD laws and regulations; identification of new or important policy issues and possible solutions permitting resolution of such issues within statutory time limits; preparation of briefing papers, testimony and speeches for the Secretary, Under Secretary for International Trade, and other Commerce officials; participation in bilateral and multilateral meetings and commissions; liaison with other areas in Commerce and other U.S. Government agencies which have an interest in the administration of the AD/CVD statutes, participation with USTR in negotiations regarding the possible suspension of AD/CVD investigations; and economic analysis of the trade effects of AD/CVD cases and certain trade monitoring activities.

This office plays a pivotal role as the lead office in the Department of Commerce and as the United States Government expert on subsidies and AD/CVD issues in the New Round of negotiations to improve the General Agreement on Tariff and Trade (GATT). Subsidies and Dumping will be main issues at the talks, and improvements to the Subsidies Code and the Dumping Code are among our top priorities. The Office of Policy manages Information Technology (IT) and provides support to the other IA units composed of: case program development; IT equipment resources; IT training; and data base development and acquisition. Tailored programs are developed for each respondent in each case to accurately and efficiently perform margin and subsidy calculations. Since calculations are accomplished on both main frame and micro processors, careful attention must be paid to the allocation of equipment, as well as the proper selection of equipment and equipment types. The use of micro and main frame processors, software selection and application are the most effective ways to integrate information technology into AD/CVD case analysis. Special and general use data bases such as exchange rates for the former and econometric models for the latter are examples of the large number of data bases developed or acquired to assist Import Administration in supporting their analysis.

o **Office of Accounting:** This Office is responsible for assuring that Import Administration uses acceptable and theoretically sound accounting and financial principles in administering the AD/CVD laws. In this role it works with all Offices in Import Administration. The Office performs all the investigative aspects including on-site verifications related to the cost of production and the constructed value areas of antidumping investigations. The complexities of this area require expert knowledge in U.S. "generally accepted accounting principles" as well as foreign accounting practices. The Office also provides guidance to Compliance and litigation support to the Office of the Chief Counsel. The expertise provided by the Office of Accounting applies to a large number of AD/CVD cases and supports the many other program and administrative aspects of Import Administration.

Summary of Workload and Performance Data

Number of:	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Potential petitioners counselled	110	130	170
AD/CVD petitions processed	40	55	60
Antidumping investigations initiated	20	78	80
Countervailing duty investigations initiated	10	15	15
AD Margins calculated	660	600	600
CVD Rates calculated	140	90	90
AD Margins per Analyst	20.6	18.8	17.6
CVD Rates per Analyst	8.2	5.3	5.3
Respondents in Antidumping cases	330	470	470
Respondents in Countervailing Duty cases	70	330	330
Respondents per Analyst	8.2	16.3	15.7
Official hearings for AD/CVD investigations	90	90	90
AD/CVD final determinations challenged in court	50	60	70
Administrative case records for litigation	60	80	100
Administrative protective orders	552	750	700
AD orders issued during fiscal year	27	40	40
CVD orders issued during fiscal year	9	15	20
Suspension agreements negotiated	5	2	3
Total AD/CVD orders in effect	268	312	365
AD orders in effect	192	223	258
CVD orders in effect	76	89	107
Total suspension agreements monitored	22	24	26
AD Suspension agreements monitored	6	6	6
CVD Suspension agreements monitored	16	18	20
Administrative reviews underway of AD/CVD orders	288	364	467
Reviews per analyst (AD/CVD)	5.88	6.62	8.49
Respondents under AD review	576	752	985

Number of:	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Respondents per AD analyst	15.16	19.79	25.92
Circumvention inquiries of AD/CVD orders	5	6	7
Scope inquiries of AD orders	25	29	34
Official hearings for AD/CVD reviews	22	28	36
SSSI's reviewed	155,000	165,000	165,000
Steel licenses/certificates reviewed	155,000	165,000	165,000
Federal Register notices on short supply requests and decisions	40	100	100
15 day short supply cases	0	15	15
30 day short supply cases	40	35	35
Foreign subsidy practices identified (Steel)	0	1,000	1,000
Foreign non-tariff measures identified (Steel)	0	100	100
Verifications to ensure compliance with international consensus agreements (Steel)	0	10	20
International consensus consultations	0	35	35
International consensus dispute settlement cases	0	14	20
Penalty assessment review of violations of Arrangements	20	25	25
Machine tool licenses/Certificates reviewed	7,000	7,000	7,000
Import Invoices reviewed	15,000	15,000	15,000
Mandatory international consultation conferences (Machine Tools)	8	8	8
Domestic formal consultation conferences (Machine Tools)	4	4	4
Invoices received for semiconductor monitoring	732,000	743,000	817,000
Consultations regarding semiconductor arrangements	7	12	15
Verifications resulting from semiconductor arrangements	25	25	31
Hours analyzing semiconductor invoices	400	400	8,000
Product FMVs calculated	6,000	6,400	8,000
Number of new and existing canadian export notices/ other softwood lumber data	250,000	270,000	300,000
Canadian provincial replacement measures	2	2	3
Consultations/issues resolution	12	16	18
Status reports on collection and outstanding softwood issues	36	28	30
Congressional responses/controlled correspondence	750	750	750
Freedom of Information Act responses drafted	34	35	35
Secretarial briefing books/papers developed	450	450	500
AD/CVD Official Case Files	678	715	752
AD/CVD Public Inspection File	678	715	752

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Number of:			
Total Collection (Vol. in Cu. Ft.) (Includes microfilm hard-copy but not archived material)	3,920	4,420	4,920
Archived Material (Vol. in cu. ft.)	440	540	640
VRA Short Supply Request Files	181	221	261
Special Files and Public Comment Files	19	25	31
Document Abstracts in Computer Database	100,000	110,000	120,000
Federal Register Documents and Files	2,500	3,140	3,780
Microfilm Court Records			
Total Records	180	215	250
Total Reels	800	1,000	1,200
Total Boxes of Hard Copy	670	890	1,110
Percent of:			
AD cases requiring specialized Acctg. expertise	50%	50%	60%
CVD cases requiring specialized Acctg. expertise	23%	23%	25%
AD/CVD cases completed within statutory time limits	100%	100%	100%
AD/CVD new cases processed by ADP-trans./case ratio	87%	88%	90%
AD/CVD admin. review cases processed by ADP-trans./case ratio	75%	77%	78%

Special Import Programs - Included in this function are the Foreign Trade Zones (FTZ) Staff and Statutory Import Programs.

o **Foreign Trade Zones Program** - This program is administered by the Foreign Trade Zones (FTZ) Staff, which serves as the operational arm of the FTZ Board, an interagency body chaired by the Secretary of Commerce. The Board was established to license (grants of authority) and regulate Trade Zones (Customs Free Zones), under the FTZ Act of 1934 (19 USC 81) and the Board's regulations (15 CFR 400). Zones are sponsored by public or public type corporations, with some operated by private corporations under agreement with licenses. The Act's public utility requirement calls for reasonable and non-discriminatory rates. User fees are to be collected for FTZ licenses and applications. The revenue generated will be turned over to Treasury with projected revenues of $400,000 for FY 1991. Annual reports to the Congress are required from the Board.

The number of zones have been increasing at an annual rate of 15-20 percent. Currently, there are 157 zones. A number of these projects include subzones (currently 158). The volume of goods entering zones rose to over $50 billion in FY 1988. About 90 percent was shipped into subzones for manufacturing operations, 85 percent of which are auto industry related. The Board is required to review manufacturing in zones and subzones in terms of the public interest. In doing so it must carefully evaluate the net economic effect of proposed operations, considering such factors as: trade and tariff policy, import penetration, export development, sourcing patterns, and impact on domestic industry. Zone savings are designed to help improve the international competitiveness of U.S. firms. States and local communities use zones as an element of their economic development efforts. FTZ activity is monitored with continuing assessment of the net economic effect of manufacturing operations and compliance with grant restrictions.

- **Statutory Import Programs:** This program is responsible for administering specific import laws. They include the Insular Watch Assembly Program authorized by P.L. 89-805 and P.L. 97-446; and the Educational Scientific and Cultural Materials Importation Act (Florence Agreement), authorized by P.L. 89-651. The insular Watch Assembly Program allocates the duty-exemption for watches imported into the United States from the Virgin Islands, Guam, American Samoa and the Northern Marianas Islands and issues special production incentive certificates authorized by P.L. 97-446; and the Florence Agreement Program determines whether scientific instruments imported into the United States by non-profit institutions qualify for duty-free entry.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Number of:			
Foreign Trade Zones			
Applications processed for new zones	10	12	12
Applications for subzones	30	35	40
Applications for reorganization of zones	16	20	30
Monitoring and enforcement of zones	70	95	110
Requests for modifications/manufacturing	100	110	130
Controlled correspondence	500	600	600
Zone tariff schedule filings	60	70	75
Rule makings and interpretations	450	600	600
Hearings and conferences	65	100	110
Special Reviews and investigations	40	35	35
Meetings and speeches on zone projects	120	100	100
Annual reports from zones processed	129	150	175
Statutory Import Programs			
Florence applications processed	300	300	300
No. watch duty-exemption allocations made and certificates issued	16	16	18

INCREASE FOR 1991
Expand AD/CVD Compliance
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Import administration	Pos./BA	326	20,637	350	21,924	24	1,287
	FTE/Obl.	303		321		18	

Expand AD/CVD Compliance (+18 FTE, +$1,287,000) - This increase will enable Compliance and the Central Records Unit/Foreign Subsidy Library (CRU/FSL) to process its significantly increased administrative caseload in a timely manner and meet statutorily mandated deadlines. Specifically:

- Compliance has experienced an ever expanding workload of orders and suspension agreements subject to administrative review. By FY 1991, Import Administration (IA) estimates that the total number of orders will have grown from 245 in 1988 to 365, an increase of 49 percent. Suspension agreements are expected to remain at about their present level. This expanding workload has led to increases in the backlog of uncompleted reviews from prior years at the same time that more reviews are begun annually. Even though Import Administration is committed to taking all necessary steps to comply with the statute, this places an unmanageable burden on the resources assigned to Compliance as it attempts to meets its obligation to conduct reviews within 12 months.

  During FY 1990, and thereafter, Compliance will be faced with conducting administrative reviews of two large families of orders, antifriction bearings and industrial belts. The nine antifriction bearing cases alone are conservatively estimated to encompass over $900 million in entries subject to review, and IA has already received clear indications that at least twenty-seven major bearing producers will request reviews. These large additions to the Compliance workload will make it even more difficult to meet the statutory deadlines in all reviews.

- Associated with the increase in the number of administrative reviews are proportionate increases in collateral activities. Among these are scope requests and circumvention inquiries. Commerce has a legal obligation to provide full and complete public records, resolve information disputes, and ensure release of proprietary information under administrative protective orders. In addition, Import Administration must coordinate with Customs field offices on duty deposit and assessment rates and issues. Import Administration personnel provide assistance to the Office of the Chief Counsel on litigation arising from administrative reviews and prepare redeterminations remanded from the Court of International Trade. Many of these redeterminations require as much work as administrative reviews.

- This increase will enable Compliance, and its constituent offices, to process its ever increasing caseload in a more timely manner consistent with the statute and, in combination with new initiatives designed to reallocate work and simplify the administrative process, to move toward the elimination of the backlog in administrative reviews.

- At the end of FY 1989, Compliance was conducting 288 administrative reviews, or 5.88 reviews per analyst. Without this increase, Import Administration estimates that there would be 597 in progress at the end of FY 1992.

- The requested increase of would reduce the number of reviews in progress at the end of FY 1992 to 578. Even this number of reviews presents a serious challenge to Import Adminstration's resources.

In accordance with the statutory requirements set forth in the enforcement of the antidumping and countervailing duty laws, our obligation to provide clear and accurate public records also calls for additional manpower and funding to support the explosion in workload in recent years. The CRU/FSL not only supports Compliance, but provides a wide variety of essential document and public information services to all of Import Administration. CRU/FSL has experienced an overwhelming increase in the volume of documents requiring filing, retrieval, distribution, and screening for public use. Most documents support antidumping and countervailing duty investigations, administrative reviews, suspension agreements, and other trade-related agreements such as the 21 steel voluntary restraint agreements. In addition, CRU/FSL has become an administrative record viewing and storage facility under a recent Court of International Trade court order. This has expanded the CRU/FSL record maintenance operation to a new dimension with the use of microfilm in addition to hard copy.

Performance Measures:

Number of:	1991	1992	1993	1994	1995
Total AD/CVD orders in effect	365	429	500	579	666
AD orders in effect	258	299	347	403	467
CVD orders in effect	107	130	153	176	199
Suspension agreements monitored	26	27	28	29	31
AD Suspension agreements monitored	6	7	8	9	11
CVD Suspension agreements monitored	20	20	20	20	20
Reviews in progress (without increase)	467	597	755	946	1,175
Reviews per analyst (without increase)	8.49	10.85	13.73	17.2	21.36
Respondents under AD Review (without increase)	985	1,284	1,660	2,125	2,693
Respondents per AD Analyst (without increase)	25.9	33.8	43.7	55.9	70.9
Reviews in progress (with increase)	467	578	712	881	1,087
Reviews per analyst (with increase)	6.87	8.26	10.17	12.59	15.53
Respondents under AD Review (without increase)	985	1,232	1,546	1,949	2,455
Respondents per Analyst	20.1	24.2	30.3	38.2	48.1
Official hearings for AD/CVD reviews	36	46	60	76	96
Circumvention inquiries of AD/CVD orders	7	8	9	11	12
Scope inquiries of AD orders	34	39	46	53	61
AD/CVD Official Case Files	752	789	826	863	900
AD/CVD Public Inspection File	752	789	826	863	900

Performance Measures:

Number of:	1991	1992	1993	1994	1995
Total Collection (Vol. in Cu. Ft.) (Includes microfilm hard-copy but not archived material)	4,920	5,420	5,920	6,420	6,920
Archived Material (Vol. in cu. ft.)	640	740	840	940	1,040
VRA Short Supply Request Files	261	301	341	381	421
Special Files and Public Comment Files	31	37	43	49	55
Document Abstracts in Computer Database	120,000	130,000	140,000	150,000	160,000
Federal Register Documents and Files	3,780	4,420	5,060	5,700	6,340
Microfilm Court Records					
Total Records	250	285	320	355	390
Total Reels	1,200	1,400	1,600	1,800	2,000
Total Boxes of Hard Copy	1,110	1,330	1,550	1,770	1,990

The personnel and object class detail for this increase follow.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Expand AD/CVD Compliance**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	548
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	10
11.8	Special personnel services payments	0
11.9	Total personnel compensation	558
12.1	Civilian personnel benefits (26.25%)	144
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	86
22	Transportation of things	0
23.1	Rental payments to GSA	121
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	43
24	Printing and reproduction	5
25	Other services	289
26	Supplies and materials	5
31	Equipment	36
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	1,287

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Expand AD/CVD Compliance**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Supervisory import compliance specialist	14	1	$50,342	$50,342
Senior import compliance specialist	13	2	42,601	85,202
Senior computer programmer analyst	13	1	42,601	42,601
Import compliance specialist	12	4	35,825	143,300
Import compliance specialist	11	4	29,891	119,564
Computer programmer specialist	11	1	29,891	29,891
Personnel staffing specialist	11	1	29,891	29,891
Import compliance specialist	9	3	24,705	74,115
Technical information specialist	9	2	24,705	49,410
Computer systems specialist	9	1	24,705	24,705
Budget analyst	9	1	24,705	24,705
Technical information specialist	7	2	20,195	40,390
Clerk-typist	4	1	16,533	16,533
Total		24		730,649
Less Lapse (25.00%)		6		(182,662)
Total full-time permanent:		18		**547,987**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	18
Other than full-time permanent	0
Total	18
Authorized Positions:	
Full-time permanent	24
Other than full-time permanent	0
Total	24

INCREASE FOR 1991
Implement the Trade Act of 1988
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Import administration	Pos./BA	326	20,637	341	21,537	15	900
	FTE/Obl.	303		314		11	

Implement Provisions of the Trade Act of 1988 Related to Antidumping and Countervailing Duty Laws (+11 FTE, +$900,000) - All Import Administration's (IA) offices involved in administration of the unfair trade statutes are affected by the 1988 Trade Act (Act). Although the Act came into force in FY 1989, IA's resource needs arising from the Act have never been addressed. Furthermore, the effects of the Act are cumulative, e.g., some provisions first applied in one investigation or review will be applied in all future reviews of that case. As of the end of FY 1989, Import Administration was conducting 288 administrative reviews and 24 investigations in antidumping and countervailing duty proceedings.

Section 1312. Actionable Domestic Subsidies

This section requires that Commerce examine and consider both the de jure and de facto availability of domestic subsidy programs in deciding whether the programs are countervailable. Although this has long been Commerce's practice, its handling of this provision will be closely scrutinized and subject to increased administrative and court challenge. Thus, Commerce must take additional care in examining and adequately explaining how it determines whether there is any difference in the availability of a program by law and in practice. In FY 1991, Import Administration estimates that it will review 101 countervailing duty orders and suspension agreements, about half of which entail at least one domestic program, and that this will require an increase of one Import Compliance Specialist.

Section 1313. Calculation of Subsidies on Certain Processed Agricultural Products

Under preexisting law, Commerce examined upstream subsidies only when it received a well documented allegation that a subsidy was passed through to the final product, and the effect was significant. This new section amends the upstream subsidy provision and directs Commerce, in reviewing possible subsidization of processed agricultural goods, to incorporate subsidies bestowed on raw agricultural inputs when two conditions are met: (1) the demand for the raw agricultural product depends on the demand for the processed agricultural product, and (2) processing adds only limited value. These conditions are more easily met than the threshold tests predating this change.

In affected reviews, this will generate a substantial increase in work. Essentially Import Administration will conduct, within the context of a review of a processed agricultural product, additional subsidy investigations of the raw agricultural inputs. This provision has potential application in approximately 10 percent of existing orders, a number of which are high profile and extremely controversial including pork products from Canada and rice from Thailand. Import Administration estimates that this provision will require an increase of one Import Compliance Specialist.

Section 1316. Dumping of Products from Nonmarket Economy Countries

This section replaces preexisting law regarding the calculation of foreign market value (FMV) in antidumping cases involving merchandise from nonmarket economy countries (NMEs). Under the provision, FMVs for NME products will generally be based on the NME producers' factors of production valued in a market economy country. This change will increase the need to examine cost elements in both the NME and the market economy country.

Import Administration currently administers 18 antidumping duty orders covering products from NMEs and estimates that the new statutory provision will require an increase of two Import Compliance Specialists and one Accountant.

Section 1318. Input Dumping by Related Parties.

In calculating constructed value under preexisting law, Commerce normally valued inputs purchased from related parties at the price charged unless the sales were determined not to be at arms length. Under new section 1318, if Commerce has reason to believe or suspect that the prices for the input are below the related party's cost of production, Commerce may use the cost of producing the input, so long as the cost exceeds the price. This change in the statute will expand the need to conduct cost studies to the level of production prior to that of the investigated product.

In FY 1991, Import Adminstration estimates that it will be conducting some 366 administrative reviews of antidumping orders. At least 20 percent of reviews, and almost all contentious reviews, involve some constructed value calculations. This provision will require an increase of two Import Compliance Specialists and one Accountant.

Section 1319. Fictitious Markets

This section amends the foreign market value (FMV) provisions of the antidumping law by describing conditions which may constitute evidence that a fictitious market has been created following the issuance of an antidumping order. In order to apply this provision, Import Administration will be required to measure relative price movements of the comparison and non-comparison products and to determine if the movement of the comparison products results in lowered dumping margins.

To date, this has been an issue in six reviews. Import Administration estimates that the provision will require the addition of one Import Compliance Specialist.

Section 1320. Downstream Product Monitoring

This section creates a monitoring mechanism for imports incorporating inputs which have been subject to a U.S. antidumping or countervailing duty finding. Specifically, a U.S. firm producing a product like a "component" part or a "downstream product" may request monitoring of a downstream product. (A component part is a product which (1) has been subject to an AD/CVD order or suspension agreement with the margin of dumping/subsidization exceeding 15 percent, where the order was issued, or the suspension agreement entered into, during the five years preceding the filing of the monitoring request, and (2) is routinely used as a major input in the downstream product. A downstream product is any manufactured article which is imported into the United States and which incorporates a component part.)

Within 14 days of receipt of the monitoring request, Commerce will determine whether (1) imports of the downstream product are likely to increase as a result of the diversion of the component part and (2) whether the component part is already subject to the steel monitoring program, merchandise related to the component part and produced in the same country as the component part has been subject to a significant number of AD/CVD findings or, merchandise similar to the component part and produced by the same manufacturer has been subject to two or more AD/CVD findings. If both determinations are affirmative, the ITC will begin monitoring the downstream product.

While a downstream product is subject to monitoring, ITC will report quarterly to Commerce and if imports increase by more than five percent in any quarter, the ITC will analyze the increase in the context of the overall economic conditions in the product sector. Based on reports it receives, Commerce will consider whether to self-initiate an AD/CVD case or will advise the ITC to cease monitoring if imports are not increasing and diversion of the component product is not likely to occur.

Section 1321. Prevention of Circumvention of Antidumping and Countervailing Duty Orders

This section added to the statutes four bases for deciding if circumvention of antidumping and countervailing duty orders is occurring: (1) parts and components shipped from the country subject to the order are assembled in the United States into the product subject to the order, and the value added in the United States is small; (2) parts and components shipped from the country subject to the order are assembled in a third country into the product subject to the order, the assembled product is shipped to the United States, and the value added in the United States is small; (3) minor alterations; and (4) products developed after the investigation is begun.

To date, Import Administration has begun five circumvention inquiries. In the one which for which a preliminary determination has been issued, the case required the assignment of four Import Compliance Specialists on a full time basis for three months and will require those same four employees for an additional three months to issue a final determination. Import Administration estimates that this provision will require five Import Compliance Specialists in fiscal year 1991.

Section 1327. Leases Equivalent to Sales

This section lists the conditions under which leases will be treated as sales for purposes of applying the antidumping and countervailing duty law. In applying this section, Import Administration must examine the commercial practice within the industry, the degree to which the leased product is integrated into the operations of the lessee or importer, the likelihood that the lease will be continued or renewed, and other relevant factors.

To date, this issue has arisen in one administrative review. Import Administration estimates that this provision will require one Import Compliance Specialist in fiscal year 1991.

The personnel and object class detail for this increase follow.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Implement the Trade Act of 1988**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	372
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	7
11.8	Special personnel services payments	0
11.9	Total personnel compensation	379
12.1	Civilian personnel benefits (26.25%)	98
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	98
22	Transportation of things	0
23.1	Rental payments to GSA	74
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	26
24	Printing and reproduction	50
25	Other services	151
26	Supplies and materials	2
31	Equipment	22
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	**900**

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Implement the Trade Act of 1988**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Senior import compliance specialist	13	2	$42,601	$85,202
Import compliance specialist	12	2	35,825	71,650
Accountant	12	3	34,580	107,475
Import compliance specialist	11	3	28,852	89,673
Import compliance specialist	9	4	24,705	123,525
Clerk-typist	5	1	17,954	17,954
Total		15		495,479
Less Lapse (25.00%)		4		(123,870)
Total full-time permanent:		**11**		**371,609**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	11
Other than full-time permanent	0
Total	11
Authorized Positions:	
Full-time permanent	15
Other than full-time permanent	0
Total	**15**

INCREASE FOR 1991
Steel Program
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Import administration	Pos./BA	326	20,637	334	21,121	8	484
	FTE/Obl.	303		309		6	

Steel Program (6 FTE, +$484,000) - This increase will allow Import Adminstration to continue to safeguard the U.S. steel industry against foreign unfair trade practices through the continued enforcement of the voluntary restraint agreement (VRA) program and the implementation and enforcement of international consensus agreements. The Administration will also be pursuing multilateral efforts to eliminate trade distorting practices in the global steel market.

- President Reagan's steel program was introduced in 1984 to address the impact of surging and unfairly traded steel imports. It was extended by President Bush for two and one half years until March 31, 1992. This program includes 18 voluntary restraint agreements and seven international consensus agreements. President Bush has stated that one of the key policy goals of his Administration will be to achieve an international consensus on the elimination of unfair trading practices involving steel.

- IA will be actively involved with the Office of the United States Trade Representative (USTR) on three fronts: 1) negotiating an international consensus in the GATT on steel trade practices; 2) administering the steel VRAs; and 3) implementing and administering the bilateral international consensus agreements. All tracks will involve consultations both in the United States and abroad and will require that IA provide personnel to work with the USTR to develop multilateral or country-by-country negotiating strategies. IA's role in steel trade policy will also continue to increase in FY 1991 as more in-depth analysis is required to design, implement and monitor the international consensus agreements. This will result in a workload increase for the policy analysts, data processing staff, and other technical specialists. In addition, IA will have to provide the public and Congress with additional technical expertise on all issues regarding domestic and foreign steel trade in light of the VRA and consensus negotiations.

- IA will be responsible for monitoring and enforcing VRA programs to ensure that foreign governments live up to their commitments. To meet this responsibility, IA will be required to travel extensively in order to verify foreign compliance with agreements.

- In conjunction with conducting consensus and VRA negotiations, IA will have additional responsibilities which include: the cataloguing of worldwide government steel subsidy programs; analysis of foreign market access barriers. IA has also recently established sweeping substantive changes and procedural modifications to the short supply provisions of the VRAs. These changes have cut the processing time for short supply cases in half. Previously the Department had 60 days to complete a short supply case.

- In 1990, IA will be required to complete short supply cases in 15 to 30 days, depending on domestic supply conditions. This requires continuous monitoring of domestic capacity utilization. IA will compile informational packages to assist potential short-supply petitioners in preparing their petition. IA will maintain an 800 telephone number dedicated to steel short supply. IA will review short supply petitions for sufficiency, and accept or return them within 24 hours of receipt. IA will publish all final decisions in the Federal Register, and hold disclosure meetings and hearings, on request. Additional resources are needed to enable IA to make the short-supply process transparent and more fully responsive to the needs of U.S. steel consumers. In total, these short supply changes will increase the workload of the short-supply staff by 75 percent.

Performance Measures:	1991	1992	1993	1994	1995
Number of:					
Federal Register notices on short supply requests and decisions	100	NA	NA	NA	NA
15 day short supply cases	15	NA	NA	NA	NA
30 day short supply cases	35	NA	NA	NA	NA
Tolling determinations	25	NA	NA	NA	NA
Foreign subsidy practices identified	1,000	NA	NA	NA	NA
Foreign non-tariff measures identified	100	NA	NA	NA	NA
Verifications to ensure compliance with international consensus agreements	10	NA	NA	NA	NA
International consensus consultations	35	NA	NA	NA	NA
International consensus dispute settlement cases	14	NA	NA	NA	NA

The personnel and object class detail for this increase follow.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Steel Program**

Object Class		**FY 1991 Increase**
11	Personnel compensation	180
11.1	Full-time permanent	0
11.3	Other than full-time permanent	3
11.5	Other personnel compensation	0
11.8	Special personnel services payments	183
11.9	Total personnel compensation	47
12.1	Civilian personnel benefits (26.25%)	0
13.0	Benefits for former personnel	80
21	Travel and transportation of persons	1
22	Transportation of things	54
23.1	Rental payments to GSA	0
23.2	Rental payments to others	19
23.3	Communications, utilities and miscellaneous charges	5
24	Printing and reproduction	69
25	Other services	10
26	Supplies and materials	16
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	484
99	**Direct obligations**	

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Steel Program**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Senior import compliance specialist	13	1	$42,601	$42,601
Import compliance specialist	12	1	35,825	35,825
Accountant	12	1	35,825	35,825
Import compliance specialist	11	2	29,891	59,782
Import compliance specialist	9	2	24,705	49,410
Clerk-Typist	5	1	16,305	16,305
Total		8		239,748
Less Lapse (25.00%)		2		(59,937)
Total full-time permanent:		**6**		**179,811**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	6
Other than full-time permanent	0
Total	6
Authorized Positions:	
Full-time permanent	8
Other than full-time permanent	0
Total	**8**

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Import administration	Pos./BA	326	20,637	325	20,599	(1)	(38)
	FTE/Obl.	303		302		(1)	

Uruguay Round - GATT (-1 FTE, -$38,000) - This decrease reflects the projected completion of the General Agreement on Tariffs and Trade (GATT) Uruguay Round negotiations in 1990. Ongoing GATT activities will continue to be performed by our remaining staff.

The personnel and object class detail for this decrease follow.

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Uruguay Round - GATT**

Object Class		**FY 1991 Decrease**
11	Personnel compensation	
11.1	Full-time permanent	(20)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(20)
12.1	Civilian personnel benefits (26.25%)	(5)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	(4)
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(2)
24	Printing and reproduction	0
25	Other services	(5)
26	Supplies and materials	(1)
31	Equipment	(1)
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	**(38)**

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Import Administration**
Subactivity: **Import Administration**
Program Change: **Uruguay Round - GATT**

Title:	**Grade**	**Number**	**Annual Salary**	**Total Salaries**
Economist	7	(1)	20,195	(20,195)
Total		(1)		(20,195)
Less Lapse (0.00%)		0		(0)
Total full-time permanent:		**(1)**		**(20,195)**

Personnel Data

Full-time Equivalent Employment:	
Full-time permanent	(1)
Other than full-time permanent	0
Total	(1)
Authorized Positions:	
Full-time permanent	(1)
Other than full-time permanent	0
Total	**(1)**

INCREASE FOR 1991
Foreign Trade Zones and Subzones
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Special Import Programs	Pos./BA	16	991	20	1,151	4	160
	FTE/Obl.	18		21		3	

Foreign Trade Zones and Subzones (+3 FTE, +$160,000) - The increase for Foreign Trade Zones (FTZ) Staff is needed to upgrade the staff's capability for in-depth economic analysis and improved monitoring of FTZ proposals and activity. This request is necessitated by the fact that during the past nine years, there has been an enormous increase in FTZ activity. The FTZ Board has authorized 90 new zones, increasing the number to 157, and approved over 140 special-purpose subzones increasing the number to 158. The FTZ program is now used widely by state and local public agencies in their economic development efforts relating to international trade and investment. The number of zone users during this period has grown from 800 firms to a current level of 2,100 (employing approximately 170,000 people) and their shipments into zones and subzones since 1980 have vastly increased from $3 billion to over $50 billion, largely due to extensive use of subzones by the auto industry.

Meanwhile, the interest in zones continues unabated. We are presently processing some 60 applications each year for new zones, subzones and expansions. The FTZ Board's docket schedule presently lists over 60 cases, and we handle an additional 35 administrative actions each year. In addition, existing projects generate a growing number of administrative and manufacturing approval requests. The GAO, in the 1989 report on FTZs to the Ways and Means Committee recommended that Commerce increase the staffing of the FTZ program in order to increase monitoring and to improve processing times on applications.

Performance Measures:

	1991	1992	1993	1994	1995
Number of:					
Foreign Trade Zones					
Applications processed for new zones	12	12	10	10	10
Applications for subzones	40	45	45	50	50
Applications for reorganization of zones	30	30	35	40	40
Monitoring and enforcement of zones	110	130	145	160	170
Requests for modifications/manufacturing	130	140	155	170	185
Rule makings and interpretations	600	650	700	750	800
Hearings and conferences	110	120	130	140	150
Special Reviews and investigations	35	40	40	45	45
Annual reports from zones processed	175	200	220	240	260

The personnel and object class detail for this increase follow.

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: **Import Administration**
Subactivity: **Special Import Programs**
Program Change: **Accelerate Foreign Trade Zones**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	80
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	2
11.8	Special personnel services payments	0
11.9	Total personnel compensation	82
12.1	Civilian personnel benefits (26.25%)	21
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	5
22	Transportation of things	0
23.1	Rental payments to GSA	20
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	7
24	Printing and reproduction	1
25	Other services	21
26	Supplies and materials	2
31	Equipment	1
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	160

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE PERSONNEL DETAIL

Activity: **Import Administration**
Subactivity: **Special Import Programs**
Program Change: **Accelerate Foreign Trade Zones**

Title:	Grade	Number	Annual Salary	Total Salaries
Foreign trade zone analyst	12	1	$35,825	$35,825
Foreign trade zone analyst	11	1	29,891	29,891
Foreign trade zone analyst	9	1	24,705	24,705
Clerk-typist	4	1	16,533	16,533
Total		4		106,954
Less Lapse (25.00%)		1		(26,739)
Total full-time permanent:		3		80,215

Personnel Data

	Number
Full-time Equivalent Employment:	
Full-time permanent	3
Other than full-time permanent	0
Total	3
Authorized Positions:	
Full-time permanent	4
Other than full-time permanent	0
Total	4

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM AND PERFORMANCE:DIRECT OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
U.S. and Foreign Commercial Service											
Field Operations and Management	Pos./BA	70	8,865	112	9,603	112	9,947	112	9,947	0	0
	FTE/Obl.	76	8,673	100	9,866	106		106		0	
Export Promotion Services	Pos./BA	96	10,726	106	10,734	106	11,095	106	11,945	0	850
	FTE/Obl.	106	11,448	101	10,979	104		104		0	
Domestic Operations	Pos./BA	304	19,996	364	20,244	364	21,238	364	21,808	0	570
	FTE/Obl.	337	20,615	337	21,097	337		337		0	
Foreign Operations	Pos./BA	618	43,600	704	54,613	704	57,235	810	65,940	106	8,705
	FTE/Obl.	665	43,016	679	56,331	679		758		79	
Total	**Pos./BA**	**1,088**	**83,187**	**1,286**	**95,194**	**1,286**	**99,515**	**1,392**	**109,640**	**106**	**10,125**
	FTE/Obl.	**1,184**	**83,752**	**1,217**	**98,273**	**1,226**		**1,305**		**79**	

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM AND PERFORMANCE:REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount	Pers.	Amount
U.S. and Foreign Commercial Service											
Field Operations and Management	FTE/Obl.	0	115	0	131	0	123	0	123	0	0
Export Promotion Services	FTE/Obl.	27	12,851	29	14,640	29	13,741	29	13,741	0	0
Domestic Operations	FTE/Obl.	0	1,153	0	1,314	0	1,233	0	1,233	0	0
Foreign Operations	FTE/Obl.	0	288	0	328	0	308	0	308	0	0
Total	**FTE/Obl.**	**27**	**14,407**	**29**	**16,413**	**29**	**15,405**	**29**	**15,405**	**0**	**0**

JUSTIFICATION OF PROGRAM AND PERFORMANCE FOR
U.S. AND FOREIGN COMMERCIAL SERVICE

Goals and Objectives for FY 1991

Goals: The goals of this subactivity are to increase America's competitiveness in the world economy, safeguard the national interest through effective administration of U.S. trade laws and improve service delivery and internal management.

Objectives: ITA will achieve the DOC goals by encouraging U.S. industry to increase U.S. exports of goods and services, expanding foreign markets by removing barriers to travel, trade and investment, increasing the number of small and medium sized exporters, administering and enforcing U.S. trade laws for reasons of national security, foreign policy, and short supply, and providing accurate and timely information and services to U.S. exporters. Other objectives are to increase the number of new-to-export (NTE) firms making a commitment to exporting; increase the number of old-to-market (OTM) firms successfully following up on their original market penetration with continued export activities; provide small and medium sized businesses capable of exporting with the commercial information and counseling necessary to develop their export marketing programs; encourage and sponsor additional involvement by the private sector and state and local governments in export promotion efforts; and assist companies in taking advantage of business opportunities created by the Caribbean Basin Initiative.

Base Program

To meet its goals, the U.S. and Foreign Commercial Service (US&FCS) develops pertinent commercial information on numerous industry/country marketing topics and provides counseling on international trade practices and opportunities to the U.S. business community. The US&FCS develops and delivers to the private sector a wide variety of promotion programs, designed to meet the export marketing needs of end users and achieve the ultimate aim of increasing U.S. exports. The US&FCS is building closer relationships with American Chambers of Commerce and other private sector organizations domestically and overseas, as well as with federal, state, and local government organizations involved in export promotion to better reach the goal of increasing U.S. exports.

Field Operations Management -- In support of the ITA subgoals to "Increase U.S. exports of goods and services," "Increase the number of small and medium sized exporters" and "provide accurate and timely information and services to U.S. travel and trade exporters," the US&FCS headquarters staff plans and coordinates the use of resources to achieve commercial policy and program objectives, and to support its domestic and overseas staff in areas such as recruitment, training, career development, financial management, and liaison with other segments of ITA, Departmental and other agency program elements. As part of this management effort, headquarters conducts Management Program Reviews to assess US&FCS activities.

Field Operations Management is responsible for building a highly motivated, well-trained corps of commercially-oriented career officers for the Office of Foreign Operations (OFO). These officers are selected as a result of a rigorous assessment process. Candidates are tested for their commercial, trade, and management experience, and intercultural and interpersonal skills.

Field Operations Management continues to encourage greater private sector participation in export promotion through (1) helping to develop cost recovery programs which more closely reflect the market value of US&FCS services and which will increase the possibility of the private sector assuming the task of providing a number of these services, (2) encouraging greater participation by volunteers in all aspects of trade promotion activities, and (3) continuing a market outreach program using the Advertising Council, business media, business trade associations, and state trade development organizations to increase the understanding and use of the information and services provided by US&FCS.

These efforts are designed to demonstrate that Federal programs can use multipliers (i.e. state and local governments, trade associations, world trade clubs, banks, and chambers of commerce) to increase private support for export promotion, and that export promotion is clearly a government/business partnership. We also are working with the Small Business Administration, Minority Business Development Agency and other appropriate agencies.

The US&FCS also has responsibility for managing the Caribbean Basin Business Information Center (CBIC) and coordinating Commerce Department activities in support of the Caribbean Basin Initiative (CBI). This includes co-chairmanship with USTR of the Caribbean Interagency Task Force and co-chairmanship of the Caribbean Basin Task Force/Subcommittee on Operations, an interagency group which meets periodically at both staff and principal levels to ensure successful implementation of the Initiative. In addition, US&FCS chairs the Caribbean Basin Business Promotion Council, established under the Federal Advisory Committee Act. CBIC's principal efforts to promote increased trade and business development under the CBI are focused on organizing a CBI support network for business, using its promotion council and its domestic and foreign offices as the core, and involving state and local government and several hundred private sector multiplier groups in the U.S. and the Caribbean Basin as well as in other foreign countries. The CBIC operates as a central information clearinghouse and conducts a business outreach and counseling program consisting of seminars, workshops, publications, business development missions, trade shows, and an "Active Match" program to bring together U.S. and Caribbean Basin firms with complementary interests.

Export Promotion Services -- In support of the ITA subgoals to "Increase U.S. exports of goods and services," "Increase the number of small and medium sized exporters" and "Provide accurate and timely information and services to U.S. travel and trade exporters," Export Promotion Services (EPS) develops and markets products and services to help U.S. firms, particularly small and medium sized companies, to promote the sale of their goods and services overseas. EPS manages ITA's overseas trade promotion, contact, and information services within the US&FCS. In this capacity, EPS provides the overseas and domestic field services with: (1) commercial information; (2) management of overseas trade events; (3) a stimulus for state/local and private sector participation in trade promotion activities; and (4) marketing and awareness publications which support domestic and overseas outreach services.

To improve service to small and medium sized exporters, EPS developed the Commercial Information Management System (CIMS). This automated system strengthens the US&FCS' ability to collect and disseminate more timely trade contact, statistical, and market research information to U.S. companies. CIMS provides better access by U.S. companies to US&FCS trade promotion services which have been redesigned to capitalize on its electronic information storage, transmission, and retrieval capabilities. As a result, US&FCS trade information and contact services and, in particular, overseas market research are more specific and, can be custom packaged to be more relevant to the specific needs of individual firms. The CIMS information data base draws from overseas embassy reports, market research studies, and information derived from post sources and surveys. CIMS was operational in all US&FCS domestic offices and major overseas posts by 1989, but full system development has not been completed. EPS also continues to charge and collect fees from CIMS users consistent with current statutory guidelines.

In addition to information on export sales leads, EPS offers an array of services, including the Agent/Distributor Service (ADS) and World Trader Data Reports (WTDR) Service which provide U.S. firms reliable commercial information on potential overseas business partners, agents, and distributors. Acknowledging the desire of U.S. companies for more specific information on overseas market opportunities, EPS disseminates electronically overseas trade opportunities collected by Commercial Officers on a daily basis to states, private entities, and other multiplier organizations who repackage the information and distribute it. In addition, EPS also offers a Comparison Shopping Service which allows a company to answer key questions regarding such matters as distribution channels, potential end users, trade barriers, and other export marketing factors in selected markets as they relate specifically to its product or service. EPS also builds foreign purchasers' awareness of U.S. products and stimulates U.S. NTE/NTM firms to market their goods overseas through Commercial News USA. Each issue of Commercial News USA reaches over 110,000 potential foreign buyers, agents and distributors. This service is particularly effective for small and medium sized firms.

Working with US&FCS and Department of State posts, other U.S. Government (USG) agencies, and state/local export promotion entities, EPS develops and helps others implement NTE/NTM focused overseas trade promotion activities. These activities include trade, seminar, "Matchmaker" and State and Industry-Organized Government Approved (S/IOGA) missions; catalog and video catalog exhibitions; USG-sponsored trade fairs and exhibitions; and U.S. Pavilions at major international trade fairs. The "Matchmaker" delegation is an example of a cost-effective overseas promotion technique which brings relatively large groups of U.S. business-persons representing NTE/NTM firms into person-to-person contact with agents, distributors, licensees, franchisees and joint venture partners.

In addition, EPS encourages private sector sponsorship of leading overseas and domestic trade shows through two activities: the Trade Fair Certification Program and the Foreign Buyer Program. Certified trade show organizers provide U.S. firms in selected overseas trade fairs with support services such as overseas promotion, translation, exhibition design, business facilities and shipping and customs assistance. Shows are promoted through the network of US&FCS and State Department posts overseas, and US&FCS district offices throughout the United States. In addition to granting Certification, EPS directly assists and counsels organizers on their marketing efforts and, at the discretion of the organizer, coordinates arrangements for special support services on a cost recovery basis. Whereas the focus of the Certification Program is on overseas events, the Foreign Buyer Program (FBP) supports private sector trade promotion efforts domestically. Working closely with organizers of leading U.S. trade shows and the American companies participating in these shows, the US&FCS promotes attendance of pre-qualified foreign buyers. U.S. companies' products, international marketing objectives, and regions of interest are identified and promoted by US&FCS posts with the intent of matching them with interested foreign buyers. Participating U.S. firms also receive export counseling prior to and during FBP events from US&FCS trade specialists.

Domestic Operations -- Domestic field offices operate in support of the ITA subgoals to "Increase U.S. exports of goods and services" and "Increase the number of small and medium sized exporters." The domestic field office structure is the primary vehicle for delivering the programs of the International Trade Administration to the U.S. business community. With district offices located in the major commercial/industrial centers in the U.S., the system constitutes a primary outreach mechanism for the U.S. Government's national trade facilitation and promotion program. The major focus of the district offices is to provide international marketing assistance and opportunities to prospective and active exporters, thereby allowing these U.S. firms to develop and sustain an international sales and marketing presence. This results in a positive impact on U.S. employment, productivity, profits, and balance of trade.

The specific program of each district is designed to take advantage of local economic and commercial conditions to enhance the exports of individual firms. Ordinarily, the program concentrates on one-to-one counseling. Firms which are identified and are actively assisted are firms which have competitive products and services and are capable of, and interested in, supporting a sustained overseas marketing effort. It can take more than two years of counselling to introduce a firm to exporting or to a new market.

Trade specialists act as counselors analyzing a firm's objectives and trade potential. They evaluate country and product demand; assist firms in formulating their foreign distribution strategies and identify suitable foreign contacts to support these strategies; explore private and public financing options such as commercial banks, the Export/Import Bank (EXIMBANK), the Foreign Credit Insurance Association (FCIA), the Overseas Private Investment Corporation (OPIC), and the Agency for International Development (AID); and provide technical guidance. They also provide more generalized assistance and marketing information.

Trade specialists use a wide variety of information and services drawn from both private and public sector sources to help firms enter new overseas markets and take advantage of specific foreign trade and investment opportunities. A world-wide cable/telex network is the primary tool in this process, with the district offices acting as local centers and the distribution nexus for the flow of ITA and State Department information to the business community and specific multipliers.

District offices support the Caribbean Basin Initiative (CBI) by providing basic information to U.S. companies and state and local governments; organizing CBI seminars; and, where appropriate, including CBI themes in broader seminars and programs. CBI information is also disseminated through district office newsletters.

Efforts involving trade finance constitute an important activity for most district offices. District offices must often provide counseling on problems that develop as a result of the competitive factors vis-a-vis the debt situation in the less-developed country (LDC) markets. The district offices, in cooperation with the EXIMBANK and Foreign Credit Insurance Association (FCIA), market the export finance services of these entities for the benefit of small- and medium-sized firms. Trade specialists also seek to work with local and regional banks in an effort to upgrade their trade finance capabilities, especially in the use of EXIMBANK and FCIA programs.

Under the auspices of the Federal/State Partnership, the district offices work with states by (1) providing export development training for state/local government representatives; (2) assisting in the development of state export finance programs; (3) providing trade and international economic data, electronically and in other forms; (4) assisting in the preparation of economic profiles to help states compete in the growth of global trade and technology; (5) developing and implementing economic growth conferences; and (6) coordinating with states in organizing trade missions and other trade events. US&FCS continues to work with the National Association of State Development Agencies and the National Governors Association to develop agreements whereby state and local export outreach efforts are coordinated with US&FCS activities.

In 1990, the district offices will launch additional pilot projects designed to: (1) establish an Exporter Assistance Service Center in eastern Iowa as a joint venture with the Chambers of Commerce. The district office will train the staffs employed by the Chambers which will be geared to making the private partners self-sufficient; (2) establish an Export Allies Network in one or more states whereby Exporter Assistance Service Centers will be established throughout the State with full-time, non-U.S. Government staff devoted to disseminating information on export opportunities, seminars, conferences, foreign buyer missions, etc.; and, (3) establish a PC-based, automated export-qualifier software program which will enable businesses to independently assess their export potential and obtain information about the basics of exporting. By making such software available to colleges and business schools as well as Export Assistance Service Centers the US&FCS will multiply its outreach capacities.

To complement individual counseling efforts, district offices are increasingly using multiplying techniques such as seminars, conferences and workshops in order to leverage the limited Federal resources available. The district offices maintain commercial libraries as reference sources for the U.S. business community. They periodically publish press releases and newsletters which identify export opportunities, list upcoming activities and include articles of interest to client firms and new exporters. To further multiply their efforts cost-effectively, the district offices enlist the support of, and coordinate activities with, state and local economic development agencies, port authorities and foreign trade zones, universities and local colleges, trade associations, world trade clubs, banks and Chambers of Commerce. The organization of the 51 District Export Councils (DEC's) is another multiplier and a key element in the campaign to combine private and public sector assistance orchestrated by each of the district offices. Nearly 600 Associate Offices, such as Chambers of Commerce, also provide assistance and refer exporters to the district offices.

Recognition of successful exporters and service organizations providing export assistance is accomplished through the President's E-Award Program. Domestic Operations works with agencies such as the Minority Business Development Agency (MBDA), the Economic Development Administration (EDA) and the Small Business Administration (SBA) in order to further export development efforts and avoid waste caused by duplication of services.

Foreign Operations—The overseas offices support Departmental and ITA goals to "increase U.S. exports of goods and services, to expand foreign markets by removing barriers to travel, trade, and investment, to increase the number of small and medium sized exporters, to administer and enforce U.S. trade laws for reasons of national security, foreign policy, and short supply, and to provide accurate and timely information and services to U.S. travel and trade exporters." The overseas offices, currently located in 65 countries, were established in 1980 to carry out Department of Commerce programs abroad to inform, advise, and support U.S. business marketing efforts.

Commercial officers analyze foreign markets, counsel U.S. business, and organize post-initiated activities directed at increasing U.S. exports. US&FCS protects and promotes U.S. business interests abroad. Specific activities include: (1) identifying trade opportunities abroad for U.S. products; (2) identifying representatives or agents for U.S. firms; (3) counseling U.S. business; (4) organizing and managing U.S. trade promotional events; (5) providing research and analysis on trade policy issues; (6) implementing Department of Commerce Export Administration and other regulatory activities; and (7) supporting the Caribbean Basin Initiative.

US&FCS officers and local national employees are responsible for identifying major projects in their host countries and alerting U.S. firms to these opportunities. US&FCS officers in many countries are the representatives abroad for the Overseas Private Investment Corporation (OPIC), the EXIMBANK, the U.S. Trade Representative (USTR), the Trade Development Program (TDP), the National Oceanic and Atmospheric Administration (fishery export promotion includes full-time positions in Brussels and Tokyo), and other U.S. government agencies. US&FCS officers monitor Multilateral Trade Negotiations (MTN) implementation and report on foreign government legislative and regulatory measures, procurement practices, and bidding and certifying procedures which affect U.S. trade in the host country. US&FCS officers intercede to assist U.S. business to settle trade disputes. They provide analyses and reports on local industry and commodity developments which have a bearing on the U.S. competitive position, as well as assessments of foreign competition.

US&FCS maintains commercial reference libraries. US&FCS officers prepare World Trader Data Reports providing background and financial information on firms with which American companies wish to do business. US&FCS posts publish and distribute newsletters which identify new U.S. products and American companies seeking agents abroad. They conduct market research to determine the potential market for specific U.S. goods and services. This market information is included in CIMS, which allows wide distribution to U.S. companies.

Officers overseas prepare an annual Country Marketing Plan (CMP) which sets forth marketing strategies with a mix of policy initiatives, trade promotion techniques, and export development programs. The CMP establishes the post's work priorities. Quarterly statistical reports cover the specific activities of each post and the services rendered to support the marketing objectives of the U.S. business community.

Efforts overseas are frequently directed toward helping small, often new-to-market firms find suitable representation abroad, providing market counseling, and initiating business and government contacts on their behalf. For the experienced exporter, the post identifies and disseminates specific new trade opportunities developed in the field, furthers their ongoing market objectives, and invites their participation in a variety of post-initiated events (trade fairs, trade missions, or catalog shows).

FCS officers also work closely with American Chambers of Commerce overseas, as well as other agencies in the U.S. missions, such as the Foreign Agricultural Service, in promoting U.S. sales abroad.

Summary of Workload and Performance Data

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Primary Policy Support			
Firms exporting for the first time	616	550	550
Firms entering at least one new market	1,973	1,750	1,950
Trade Facilitation Sessions, Domestic and Overseas: 1/			
Domestic Facilitation Sessions	119,290	112,000	112,000
Overseas Trade Facilitation Sessions	116,361	140,000	162,000
Conferences and seminars held in the U.S.	2,947	2,900	2,700
Government procurement conferences in the U.S.	10	25	25
Post initiated overseas promotional events	611	650	750
Overseas trade promotion events held	172	175	195
Participants in DOC overseas promotion events 2/	4,935	3,100	3,300
Trade leads from overseas promotion events	182,000	140,000	168,000
Overseas S/IOGA Missions supported	28	30	30
Other state/local government/industry missions supported	209	220	220
Certified events held 3/	40	40	35
Foreign Buyer Program (FBP) events held	22	18	19
U.S. firms assisted through FBP participation	3,800	3,600	3,600
NTE/NTM firms assisted through CNUSA/NPIS	1,440	1,440	1,440
Agent/Distributor Service reports provided	3,894	3,900	3,900
World Trader Data Reports provided	2,428	4,500	4,500
Overseas Market Studies performed by post personnel	350	350	360
CIMS retrievals	35,000	30,000	38,000
Contractual Market Research Studies	135	0	0
Management Program Reviews of US&FCS Offices	7	8	8

1/ One firm may require numerous sessions.
2/ 1988 statistics reflected 2,300 participants in a special, large-scale, catalog-show promotion.
3/ Decline in applications due to recent political events in China.

INCREASE FOR 1991
Commercial Information Management System
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Export Promotion Service	Pos./BA	106	11,095	106	11,945	0	850
	FTE/Obl.	104		104		0	

Improve Data Processing and Access -- Commercial Information Management System (CIMS) (+0 FTE, +$850,000) - This increase will allow us to maintain CIMS basic operations while ITA undertakes its technical and strategic reviews to determine the proper role of CIMS in the National Trade Data Bank (NTDB). This increase also allows CIMS to meet mandated information dissemination and design standards associated with NTDB.

The actual allocation of these funds for hardware and software will be based on the recommendations of the technical and strategic reviews conducted during FY 89 and FY 90. Based on preliminary findings, we believe FY 91 funds will be focused on replacing the CIMS computer and meeting NTDB needs, while FY 92 and outyear increases will go towards developing software, replacing field hardware and training. The changes outlined below, reflect current thinking and are responsive to the GAO's recommendations and funding suggestions.

FY 91 Orientation:

-- Replace aging, outmoded, CPU which is operating at full storage capacity. Once this capacity is full (by late Summer or Fall of 1990 at the current rate of usage) CIMS will no longer be able to accommodate additional information or the overseas sites yet to be hooked into the system. Original project design called for replacing the Wang VS300 with a larger mainframe when current usage rates were reached. Without a new CPU which can accommodate a vastly expanded number of headquarters and field users, as well as process data more quickly with improved software, CIMS viability will come into question in the near future. Limited ports and storage capability already have resulted in long queues during peak hours and degraded, slow system response time which discourages broader use of the system.

-- Fund data conversion/transmission of CIMS data into the NTDB.

-- Provide basic access to the NTDB for district offices through a private vendor or CD-ROM equipment.

FY 92 and Beyond Orientation:

-- Replace obsolete Wang OIS machines at domestic sites with up-to-date equipment which can adequately store, process, and retrieve CIMS data and handle office automation, communication and multiworkstation functions. Current units were designed primarily for local word processing.

-- Replace old and nonrepairable PCs and printers in field locations so these offices can quickly retrieve and print reports for exporters. Currently, inadequate retrieval and printing capability discourages field offices from regularly promoting and using CIMS data.

-- Develop CIMS processing functions and software which are not complete. These include: new or improved software to ensure consistent, complete, efficient, easy, and quick retrievals, and better automatic usage tabulations; an order/entry system; a hardware and software inventory system; a program to permit entry of trade contact information by sources other than FCS posts or district offices; a trade event calendar/tracking system for use by all of ITA; and system enhancements to allow the automated processing of World Traders Data Reports, Trade Opportunity Program leads, and other information products.

-- Provide software to utilize NTDB data effectively at district offices.

-- Provide training related to new CPU processing, new functional files, and improved software capabilities.

GAO reports and field feedback indicate that domestic PC sites and some overseas locations have difficulty in exchanging data with the central system, and often do not obtain retrieval results in a timely and efficient manner. Without the completion and improvement of software, CIMS cannot provide all of the trade data or integrated processing functions called for in its basic design, will incur unnecessary processing costs, and will result in continued telecommunications and retrieval difficulties which are detrimental to users.

Performance Measures:

	1991	1992	1993	1994	1995
CIMS retrievals	8,000	12,000	12,000	12,000	12,000

The object class detail for this increase follows:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **U.S. and Foreign Commercial Service**
Subactivity: **Export Promotion Services**
Program Change: **Improve Data Processing and Access – Commercial Information Management System (CIMS)**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits (26.25%)	0
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	75
26	Supplies and materials	0
31	Equipment	775
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	**850**

INCREASE FOR 1991

Domestic Staffing Relocation

(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Domestic Operations	Pos./BA	364	21,238	364	21,808	0	570
	FTE/Obl.	337		337		0	

Domestic Staffing Relocation (0 FTE, +$570,000) - This increase is needed to permit the transfer of domestic office positions to locations which service large numbers of firms and industries with high export potential. Realizing the finite nature of existing resources, the US&FCS has developed a planning model using a variety of economic factors such as number of manufacturers by state, manufacturing value added, firm size, and dollar value of manufactured exports for use in identifying, in part, where scarce resources would be most effectively assigned to reach the largest number of small and medium sized firms with significant export potential.

Realignment of resources against the model can not be accomplished solely through attrition, nor is it desirable to wait several years for vacancies to occur. These funds are requested for one time expenses necessary to relocate approximately nineteen trade specialist positions. Without these funds, US&FCS will be further hampered in making efficient use of resources and in undertaking a variety of public/private activities where such ventures are of benefit to the export community.

The reassignment of approximately nineteen positions should not require the closing of any of the US&FCS's current domestic offices.

Performance Measures:

This increase supports the program activities of Domestic Operations and sustains the continued performance of Domestic Operations programs.

The object class detail for this increase follows:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: U.S. and Foreign Commercial Service
Subactivity: **Domestic Operations**
Program Change: **Domestic Staffing Relocation**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits	250
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	67
22	Transportation of things	253
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	0
26	Supplies and materials	0
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	570

INCREASE FOR 1991
Security
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Foreign Operations	Pos./BA	704	57,235	704	58,085	0	850
	FTE/Obl.	679		679		0	

Security (0 FTE, + $850,000) - This increase is essential to provide for the physical security of new and existing U. S. and Foreign Commercial Service (US&FCS) staff located overseas. The funds are requested to provide the minimum personal security, such as residential guards, mandated by regional security officers for both current and proposed staff.

US&FCS personnel overseas are perhaps the most visible targets for anti-American terrorism attacks after the Ambassador. The US&FCS program objectives require representing American commercial interests out in the public arena at trade fairs, before business audiences, and to prospective foreign buyers of U.S. goods. Officers and FSNs are highly visible in the local community and frequently travel to industrial centers away from capital cities. Increased terrorism and crime in many markets have made round-the-clock physical security measures mandatory in a number of countries which despite these risks remain sound markets for U.S. goods. These funds will initiate a replacement cycle for light armored vehicles which are currently required in sixteen US&FCS countries (vehicles were originally purchased with Department of State funds which are no longer available). The increase will also provide the communications equipment necessary to link both vehicles and residences to embassy compounds and local security forces where the threat level indicates; for drivers trained in escape and evasion techniques; and maintenance for existing new vehicles.

Additional funds will be used to purchase equipment and hire guards to secure residences in high threat posts. This requirement is not new, but was met through an agreement in 1987 and 1988 with the Department of State (DOS). Due to budgeting constraints DOS no longer has funds available to provide items such as solid-exterior "safe-havens" and exterior grill work in any but high threat posts, nor does the Department of State provide local guards at other than high terrorism-threat posts. This leaves US&FCS officers exposed in many countries where the terrorism threat is low but where high local violent crime continues to pose a personal safety hazard. The inability of the US&FCS to provide an acceptable level of security for its officers and their families in environments where conditions are less than optimum, and where being a US government employee increases the risk, is an untenable position. Recent experiences in Algeria, Panama, and the Philippines serve to reinforce the necessity of funding both equipment and protective guard services. This request will not fund the security measures specifically cited and funded under the Inman Legislation for offices, but rather is directed toward transport and residential needs.

Performance Measures:

This increase is in support of the personnel of Foreign Operations and sustains their continued performance.

The object class detail for this increase follows:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: **U.S. and Foreign Commercial Service**
Subactivity: **Foreign Operations**
Program Change: **Security**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	0
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	0
12.1	Civilian personnel benefits (26.25%)	0
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	0
22	Transportation of things	0
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	0
24	Printing and reproduction	0
25	Other services	700
26	Supplies and materials	100
31	Equipment	50
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	**850**

INCREASE FOR 1991
Foreign Staffing
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		Increase	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Foreign Operations	Pos./BA	704	57,235	811	65,147	107	7,912
	FTE/Obl.	679		759		80	

Foreign Staffing (80 FTE, +$7,912,000) - This request provides for increased staff devoted to providing commercial and policy information to government and business leaders, identifying potential markets and to providing trade promotion activities designed to capitalize on expanded export opportunities for U.S. companies' goods and services. This increase directly supports the Departmental goals of assisting small and medium sized exporters, opening foreign markets by removing barriers to travel, trade and investment, and providing accurate and timely information and services to U.S. travel and trade exports.

The current, competitive price of America's goods provides an ever increasing number of U.S. producers with a unique opportunity to enter new export markets and/or expand export market share. However, the recent, extraordinary events in Eastern Europe and the Soviet Union, the emergence of a cohesive Western European market in 1992, the continued strength of the Japanese export drive, and the increased competitiveness of the newly-industrialized countries will present new challenges to the U.S. which must be met by improving and enlarging the overseas "sales force" of the US&FCS. Existing resources do not permit implementation of initiatives identified under the Omnibus Trade Act of 1988 such as enhancing trade promotion in the Pacific Rim. This increase will permit limited expansion to take advantage of emerging opportunities related to the enhanced price competitiveness and improved quality of U.S. goods, and the opening of new markets in Eastern Europe and elsewhere. Further, the U.S. must act aggressively to catch up with its major competitors in providing encouragement and assistance to exporters. Currently the U.S. ranks virtually last among major trading nations in all measures of trade promotion activity from overseas staffing to spending per capita. U.S. firms cannot compete alone against the combined resources of foreign governments and foreign companies.

The overall increase will augment overseas staff by 27 officers and 80 FSN's in major markets in Europe, Latin America, the Middle and Far East. The expanding market opportunities of the 1990's in these markets fully warrant additional officer and Foreign Service National staff. Reductions in all but a few US&FCS markets have stretched resources to the point where we frequently experience staffing gaps of U.S. officers which affect our ability to assist U.S. firms. This increased staffing and the associated staff training will also permit existing positions to remain fully staffed as senior officers are rotated back to the U.S. for legislatively mandated State-side tours of duty.

In 1989, Eastern European countries, with the encouragement of the Soviet Union, dramatically altered their politics and began to change their economic and commercial foundations. The resulting requests for commercial information and assistance for U.S. firms has overwhelmed the small US&FCS staffs in these countries which have been staffed at levels appropriate to the cold war. American businesses are seeking to fill pent-up consumer and capital-goods demand in these countries long after other countries, such as Germany began to carefully nurture their long-term prospects. Assistance is required for American firms to overcome their disadvantaged starting position.

The increase will augment initial skeletal staffing at the European Economic Community, Brussels and increase staff in London. The advent of Europe 1992, by which the 12 member European Economic Community will become a single integrated market, will dramatically alter the way business is conducted in Europe. If American firms are to retain and increase their share of the European market (which at $ 4 trillion dollars in 1992 will be the single largest world market for U.S. products) they must: have knowledge of pending regulations; have current market intelligence; and be positioned to take action on market opportunities through joint ventures, agents, direct sales or whatever means the new Single Integrated Market Program dictates. Advanced marketing intelligence coupled with informed, incisive, policy formulation will be key. The US&FCS plans to establish a limited presence in EC Brussels in 1990 -- this post must be fully staffed by 1991 with an additional commercial officer and support staff. The United Kingdom will play a pivotal role in many U.S. companies' efforts to penetrate the EEC market place and thus warrants an additional officer dedicated to Community affairs.

The increase also enhances US&FCS activity in the critical area of intellectual property rights protection. As an integral part of the GATT negotiations, intellectual property protection is the focus of major concern in several countries. We propose additional staff for Brazil and other countries to support the workload related to copyright and intellectual property protection in this largest Latin American Market. This effort will complement the work performed by International Economic Policy.

This increase also supports a stronger Pacific Rim outreach program. In concert with other ITA units we will increase export expansion efforts in Japan and newly industrialized nations like Singapore and Korea, in order to allow U.S. industries to maintain their market shares. Singapore; Fukuoka and Sapporo, Japan; and Indonesia are seriously understaffed and would be the critical focus of a Pacific Rim outreach effort. Singapore is the fastest growing economy in South East Asia and is geographically positioned to be the springboard for entry into surrounding markets. It is also a hospitable business/commercial environment, one in which U.S. firms can market increasingly high tech goods. Fukuoka represents the center of the Japanese electronics industry and as such should be a target for expanding U.S. sales of highly competitive electronic processes. These opportunities will not be captured unless additional staff are made available who can identify markets early-on, before competitor nations have closed the door to U.S. firms.

The funds requested pay for personnel-related expenses with a minimum of operating costs. The request reflects the change in the billings for Foreign Affairs Administrative Services which will take place in 1990.

Performance Measures:

	1991	1992	1993	1994	1995
Overseas trade facilitation sessions .	22,000	22,000	22,000	22,000	22,000
Post initiated overseas promotional events	100	100	100	100	100
Trade leads from overseas promotion events	28,000	28,000	28,000	28,000	28,000

The personnel and object class detail for this increase follow:

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: U.S. and Foreign Commercial Service
Subactivity: **Foreign Operations**
Program Change: **Foreign Staffing**

Object Class		**FY 1991 Increase**
11	Personnel compensation	
11.1	Full-time permanent	2,757
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	110
11.8	Special personnel services payments	0
11.9	Total personnel compensation	2,867
12.1	Civilian personnel benefits	760
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	750
22	Transportation of things	150
23.1	Rental payments to GSA	0
23.2	Rental payments to others	490
23.3	Communications, utilities and miscellaneous charges	350
24	Printing and reproduction	65
25	Other services	2,200
26	Supplies and materials	80
31	Equipment	200
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	7,912

Department of Commerce
International Trade Administration
Operations and Administration

PROGRAM CHANGE PERSONNEL DETAIL

Activity: **U.S. and Foreign Commercial Service**
Subactivity: **Foreign Operations**
Program Change: **Foreign Staffing**

Title:	Grade	Number	Annual Salary	Total Salaries
Senior Foreign Service Officer	2	1	$74,400	$74,400
Commercial Officer	1	2	59,216	118,432
Commercial Officer	2	8	47,983	383,864
Commercial Officer	3	9	38,881	349,929
Commercial Officer	4	6	31,505	189,030
Commercial Officer	5	1	25,529	25,529
Foreign Service National	Ungraded	80	31,690	2,535,200
Total		107		3,676,384
Less Lapse (25.00%)		(27)		(919,096)
Total full-time permanent:		**80**		**2,757,288**

Personnel Data

	Number
Full-time Equivalent Employment:	
Full-time permanent	80
Other than full-time permanent	0
Total	**80**
Authorized Positions:	
Full-time permanent	107
Other than full-time permanent	0
Total	**107**

DECREASE FOR 1991
Uruguay Round - GATT
(Dollar amounts in thousands)

		1991 Base		1991 Estimate		(Decrease)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Foreign Operations	Pos./BA	704	57,235	703	57,178	(1)	(57)
	FTE/Obl.	679		678		(1)	

Uruguay Round - GATT (-1 FTE, -$57,000) - This decrease is requested in response to the anticipated completion of the Uruguay Round of GATT in 1990. While GATT related activities will continue, those ongoing activities will be handled by our remaining staff.

The personnel and object class detail for this decrease follow:

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: U.S. and Foreign Commercial Service
Subactivity: **Foreign Operations**
Program Change: **Uruguay Round - GATT**

Object Class		FY 1991 Decrease
11	Personnel compensation	
11.1	Full-time permanent	(26)
11.3	Other than full-time permanent	0
11.5	Other personnel compensation	0
11.8	Special personnel services payments	0
11.9	Total personnel compensation	(26)
12.1	Civilian personnel benefits	(13)
13.0	Benefits for former personnel	0
21	Travel and transportation of persons	(2)
22	Transportation of things	(2)
23.1	Rental payments to GSA	0
23.2	Rental payments to others	0
23.3	Communications, utilities and miscellaneous charges	(5)
24	Printing and reproduction	(1)
25	Other services	(6)
26	Supplies and materials	(2)
31	Equipment	0
32	Lands and structures	0
33	Investments and loans	0
41	Grants, subsidies and contributions	0
42	Insurance claims and indemnities	0
43	Interest and dividends	0
44	Refunds	0
99	**Direct obligations**	(57)

Department of Commerce
International Trade Administration
Operations and Administration
PROGRAM CHANGE PERSONNEL DETAIL

Activity: **U.S. and Foreign Commercial Service**
Subactivity: **Foreign Operations**
Program Change: **Uruguay Round - GATT**

Title:	Grade	Number	Annual Salary	Total Salaries
Commercial Officer	5	(1)	$25,529	($25,529)
Total		(1)		(25,529)
Less Lapse (0.00%)		(0)		(0)
Total full-time permanent:		**(1)**		**(25,529)**
Personnel Data				
Full-time Equivalent Employment:				
Full-time permanent		(1)		
Other than full-time permanent		0		
Total		**(1)**		
Authorized Positions:				
Full-time permanent		(1)		
Other than full-time permanent		0		
Total		**(1)**		

Department of Commerce
International Trade Administration
Operations and Administration

SUMMARY OF REQUIREMENTS BY OBJECT CLASS

(Direct Obligations in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	Personnel compensation			
11.1	Full-time permanent	88,280	91,059	2,779
11.3	Other than full-time permanent	3,678	3,678	0
11.5	Other personnel compensation	1,970	2,102	132
11.8	Special personnel services payments	100	100	0
11.9	Total personnel compensation	94,028	96,939	2,911
12.1	Civilian personnel Benefits	18,562	19,663	1,101
13	Benefits for former personnel	400	400	0
21	Travel and transportation of persons	5,526	6,571	1,045
22	Transportation of things	513	915	402
23.1	Rental payments to GSA	11,004	11,086	82
23.2	Rental payments to others	3,560	4,050	490
23.3	Commun., util., misc. charges	5,705	6,078	373
24	Printing and reproduction	2,414	2,604	190
25	Other services	32,663	35,971	3,308
26	Supplies and materials	1,660	1,853	193
31	Equipment	1,388	2,500	1,112
41	Grants, subsidies and contributions	3,693	350	(3,343)
42	Insurance claims and indemnities	20	20	0
43	Interest and dividends	20	20	0
44	Refunds	0	0	0
99	Subtotal, Direct Obligations	181,156	189,020	7,864
	Reimbursable Obligations	17,000	17,000	0
TOTAL OBLIGATIONS		**198,156**	**206,020**	**7,864**

Personnel Data:	1991 Base	1991 Estimate	Increase/ (Decrease)
Full-time Equivalents			
Full-time permanent	2,211	2,302	91
Other than full-time permanent	120	120	0
Total	2,331	2,422	91
Authorized Positions:			
Full-time permanent	2,371	2,502	131
Other than full-time permanent	75	75	0
Total	2,446	2,577	131

Department of Commerce
International Trade Administration
Operations and Administration

DETAILED REQUIREMENTS BY OBJECT CLASS

(Dollar amounts in thousands)

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
11	**Personnel compensation**			
11.1	**Full-time permanent**			
	Executive level	422	422	0
	Senior executive service	3,536	3,536	0
	General schedule	59,262	59,309	47
	Senior foreign service	1,590	1.646	56
	Foreign service staff	10,030	10,806	776
	Foreign service nationals	13,440	15,340	1,900
	Subtotal	**88,280**	**91,059**	**2,779**
11.3	**Other than full-time permanent**			
	General schedule	3,678	3,678	0
	Experts & consultants	0	0	0
	Subtotal	**3,678**	**3,678**	**0**
11.5	**Other personnel compensation**			
	Overtime	1,341	1,431	90
	Cash awards	629	671	42
	Subtotal	**1,970**	**2,102**	**132**
11.8	**Special personnel services payments**			
	Foreign service officers (State)	100	100	0
	Subtotal	**100**	**100**	**0**
11.9	**Total personnel compensation**	**94,028**	**96,939**	**2,911**

Mr. **Smith**. Here to testify in support of this request is J. Michael Farren, Under Secretary for International Trade. Since this is your first appearance before this Subcommittee in this capacity, we shall insert your biographical sketch into the record at this point, and then you may proceed with your statement.

[The biography of Mr. Farren follows:]

BIOGRAPHY OF J. MICHAEL FARREN, UNDER SECRETARY FOR INTERNATIONAL TRADE, U.S. DEPARTMENT OF COMMERCE

J. Michael Farren was confirmed as under secretary of commerce for international trade by the U.S. Senate on June 9, 1989.

Mr. Farren was deputy director of President Bush's transition team from November 1988 to January 1989, and was an attorney at the law firm of Wiggin and Dana in New Haven, Connecticut, from September to November of 1988.

Mr. Farren served as deputy under secretary for international trade at the Commerce Department from September 1985 to July 1988. He previously served as counsellor to the commerce secretary, and as director of Commerce's Office of Business Liaison.

From August 1981 to June 1983, Mr. Farren was director of White House Liaison and executive assistant to the deputy chairman of the Republican National Committee. He also served as vice president of the Greater Waterbury Chamber of Commerce in Waterbury, Connecticut, for two years.

Mr. Farren was district representative and campaign director for U.S. Representative Ronald A. Sarasin for four years.

Born in Waterbury, Connecticut, Mr. Farren holds a juris doctor degree from the University of Connecticut School of Law, a master's degree from Trinity College, and a bachelor's degree from Fairfield University. He resides in Washington, D.C.

Mr. **Farren**. Mr. Chairman, I have a statement to enter for the record and also some opening comments, if that would be appropriate or permissible.

Mr. **Smith**. All right, please go ahead.

Mr. **Farren**. Mr. Chairman, sitting at the table with me are Alan Neuschatz and Roger Wallace. Alan is the Director of Administration. Roger is the Deputy Under Secretary for Trade at the Commerce Department.

ITA has a formidable task ahead of it for fiscal year 1991, and for that reason we are coming in asking for a significant increase, particularly in our Foreign Commercial Service budget. We are confronting major changes in Eastern Europe, new opportunities and a challenge for U.S. business in Panama, a persistent trade problem with Japan, expanding opportunities with EC 92, and unfolding opportunities in Canada as a result of the Canadian Free Trade Agreement.

ITA, as you know, Mr. Chairman, is at the forefront of the Administration's effort to improve the export position of U.S. business. We are responsible for taking advantage of expanding overseas markets and also dealing with persistent trade problems that U.S. business continues to confront.

As the primary agency responsible for export promotion, we are working very diligently, particularly in the area of assisting small and medium-size firms that are new to exporting and perhaps offer the greatest opportunity for American business in terms of taking advantage of expanding markets. We are increasingly becoming what we might term the wholesalers of information for export promotion—making use of State and local governments, multiplier associations, and business associations to provide information, particularly to small business. We are especially looking at opportunities to work with local business associations such as local Chambers of Commerce, and provide the wherewithal, particularly with respect to overseas resources, that these institutions need in order to help small business—again going back to the focus on the need for additional resources for the U.S. and Foreign Commercial Service.

We are vigorously enforcing U.S. import laws. As you know, Mr. Chairman, we are responsible for the Antidumping and Countervailing Duty laws, and in fact this year asked for additional resources to assist in those efforts. We are responsible for the implementation of the Machine Tool Agreements with Japan and Taiwan, the Semiconductor Agreement with Japan, monitoring of the Softwood Lumber Agreement with Canada and, as I mentioned, the various provisions of the U.S.-Canada Free Trade Agreement that also relates to the implementation of AD/CVD laws.

We have been involved in the negotiation of the Steel Voluntary Restraint Agreements this year. We also, of course, are responsible for things such as the Foreign Trade Zone program.

BUDGET INCREASE REQUESTS

Our budget, Mr. Chairman, reflects the changing opportunities for U.S. business and our changing responsibility. We are asking for $7.9 million and 107 new positions to increase foreign staffing. That will allow us to focus on EC 92, opportunities in the Pacific Rim, expanding opportunities in Eastern Europe, and the implementation of the Canadian Free Trade Agreement.

We are seeking $850,000 to cover specific costs that Commerce must bear to provide for security for our staff overseas.

We are seeking $850,000 to purchase a new processing unit and associated software for our information system, CIMS.

We are also seeking $570,000 for domestic office relocations, allowing us to better utilize the staff that we have available domestically working with the local communities.

We are also seeking further increases for resources required for the continuation of the steel program for EC 92 information-gathering, and also for the International Economic Data System and the National Trade Data Bank which was called for in the 1988 Trade Act. We are also seeking resources that will assist us in the implementation of the antidumping and countervailing duty program.

BUDGET DECREASE REQUESTS

We are seeking decreases, Mr. Chairman, in the Trade Adjustment Assistance program, also in the resources that were utilized for the U.S.-Canada FTA during its negotiation and initial implementation, and for a small percentage of the GATT Uruguay Round activities, in anticipation of the actual negotiations coming to a close in December of this year and implementation following next year.

That is the extent of my opening statement, Mr. Chairman. My written statement is available for the record, and I welcome your questions.

[The information follows:]

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
12.1	**Civilian personnel benefits**			
	Civil service retirement	3,898	4,129	231
	Federal employees' retirement	4,640	4,916	276
	Thrift savings plan	557	630	73
	Federal insurance contribution act	2,970	3,146	176
	Health insurance	2,598	2,750	152
	Life insurance	167	177	10
	Employees' compensation fund	461	461	0
	Other	3,271	3,454	183
	Subtotal	**18,562**	**19,663**	**1,101**
13	**Benefits for former personnel**			
	Severance pay	400	400	0
	Unemployment compensation	0	0	0
	Subtotal	**400**	**400**	**0**
21	**Travel and transportation of persons**			
	Common carrier	160	191	31
	Mileage	116	138	22
	Per diem/actual	2,812	3,213	401
	Vehicular	110	131	21
	Other	2,328	2,898	570
	[Overseas estimates]	[1,980]	[2,370]	[754]
	Subtotal	**5,526**	**6,571**	**1,045**
22	**Transportation of things**	**513**	**915**	**402**
	[Overseas estimates]	[191]	[341]	[150]
23.1	**Rental payments to GSA**	**11,004**	**11,086**	**82**
23.2	**Rental payments to others**	**3,560**	**4,050**	**490**

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
23.3	**Communications, utilities and miscellaneous charges**			
	Rental of ADP equipment	186	201	15
	Rental of office copying equipment	254	274	20
	Other equipment rental	540	584	44
	Federal telecommunications system	1,135	1,135	0
	Other telecommunications services	1,383	1,496	113
	Postal Service by USPS	1,316	1,424	108
	Other	891	964	73
	[Overseas estimates]	[1,024]	[1,374]	[350]
	Subtotal	**5,705**	**6,078**	**373**
24	**Printing and reproduction**			
	Publications	676	730	54
	Public use forms	63	52	(11)
	Envelopes	15	16	1
	Other	1,660	1,806	146
	[Payments to GA, WCF]	[590]	[643]	[53]
	[Overseas estimates]	[329]	[288]	[65]
	Subtotal	**2,414**	**2,604**	**190**
25	**Other services**			
	Training:			
	University	112	125	13
	Office of personnel management	56	60	4
	Other	800	875	75
	Maintenance of equipment	450	550	100
	GSA reimbursable services	125	150	25
	Payments to GA, WCF	9,680	9,880	200
	Other non-government contracts	280	300	20
	Representation	300	300	0
	Other	20,860	23,731	2,871
	[Overseas estimates]	[10,233]	[13,123]	[2,900]
	Subtotal	**32,663**	**35,971**	**3,308**

Object Class		1991 Base	1991 Estimate	Increase/ (Decrease)
26	**Supplies and materials**			
	Office supplies	548	612	64
	ADP supplies	282	315	33
	Other	830	926	96
	[Overseas estimates]	[736]	[916]	[180]
	Subtotal	**1,660**	**1,853**	**193**
31	**Equipment**			
	Office machines and equipment	722	1,300	578
	ADP hardware	333	600	267
	ADP software	333	600	267
	[Overseas estimates]	[882]	[1,051]	[250]
	Subtotal	**1,388**	**2,500**	**1,112**
32	**Lands and structures**	**0**	**0**	**0**
33	**Investments and loans**	**0**	**0**	**0**
41	**Grants, subsidies and contributions**	**3,693**	**350**	**(3,343)**
42	**Insurance claims and indemnities**	**20**	**20**	**0**
43	**Interest and dividends**	**20**	**20**	**0**
99	**Subtotal, Direct Obligations**	**181,156**	**189,020**	**7,864**
	Reimbursable Obligations	**17,000**	**17,000**	**0**
TOTAL OBLIGATIONS		**198,156**	**206,020**	**7,864**

Department of Commerce
International Trade Administration
Operations and Administration

AVERAGE GRADE AND SALARIES

	1989 Actual	1990 Estimate	1991 Estimate
Direct:			
Average ES salary	$73,948	$76,000	$76,610
Average GS grade	10.55	10.52	10.50
Average GS salary	$37,778	$38,798	$39,138
Average grade and salary established by the Foreign Service Act of 1980 (U.S.C. 801-1158):			
Average Senior Foreign Service salary	$76,146	$78,887	$81,727
Average Foreign Service grade	2.74	2.77	2.77
Average Foreign Service salary	$57,480	$59,549	$59,549
Average salary in foreign countries	$28,177	$31,690	$31,690

Department of Commerce
International Trade Administration
Operations and Administration

CONSULTING AND RELATED SERVICES

(Obligations in thousands of dollars)

	1989 Actual	1990 Estimate	1991 Estimate
Consulting services	$50	---	---
Management and professional services	28	$28	$28
Special studies and analyses	69	50	---
Management and support services for research and development	---	---	---
Total	147	$78	$28

ITA requires consulting services to meet relatively short-term requirements for industry and/or economic expertise. Because of various ITA programs which focus on very narrow areas (specific export promotion events, negotiations, antidumping and countervailing duty cases), it is preferable to maintain the ability to obtain short-term expertise rather than a permanent staff capacity.

Consulting services: These services were used in Import Administration for a court ordered specialized econometric model in connection with the antidumping finding on Korean televisions ($50,000 in FY 1989).

Management and professional services: These services provide technical expertise, interpretation and stenographic services required in antidumping and countervailing duty case hearings and verifications ($28,000 annually).

Special studies and analyses: These services were used to conduct an independent technical review of the Commercial Information Management System in the United States Foreign and Commercial Service ($69,000 in FY 1989). These services will provide advice and information for the Airbus Study in Trade Development ($50,000 in FY 1990).

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PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	1988 Actual	1989 Actual	1990 Estimate	1991 Estimate
Periodicals	$258	$304	$320	$340
Pamphlets	1,338	1,571	1,580	1,590
Audiovisuals	10	10	10	10
Total	$1,606	$1,885	$1,910	$1,940

ITA publications, periodicals as well as pamphlets, are one of the most essential tools through which the organization fulfills its mission to carry out the U.S. Government's nonagricultural trade activities, to encourage and promote U.S. exports of manufactured goods, administer U.S. statutes and agreements dealing with foreign trade, and to advise on U.S. international and domestic trade and commercial policy. Periodicals such as Foreign Economic Trends (International Economic Policy), Business America (Administration), Overseas Business Reports (International Economic Policy and Trade Development), play a significant role in keeping the U.S. business community informed on current trade conditions.

Individual publications (flyers, brochures, trade fair promotional materials (Trade Development), economic and market research studies (International Economic Policy and Trade Development), foreign direct investment reports (Trade Development) play an equally essential role in keeping the business public informed on particular aspects of the global business picture which ITA is charged with disseminating. The annual U.S. Industrial Outlook is Department of Commerce's and the U.S. Government's preeminent report on domestic industry. Audio visual products, mainly in the form of slide presentations, are currently used to a very small degree, primarily to assist Commerce District Office personnel in acquainting the business public with new of significantly revised ITA programs.

PREPARED STATEMENT BY J. MICHAEL FARREN
UNDER SECRETARY FOR INTERNATIONAL TRADE
DEPARTMENT OF COMMERCE

Before the Subcommittee on
Commerce, Justice, State, the Judiciary and Related Agencies
Committee on Appropriations
House of Representatives
March 6, 1990

Mr. Chairman, Mr. Rogers, and members of the Subcommittee, I appreciate the opportunity to appear before you in support of the International Trade Administration's FY 1991 budget request.

Our request for $189 million and 2,577 positions represents an increase of $10.2 million and 131 positions over the 1990 appropriation and reflects this Administration's strong commitment to promote international trade in a global economy. In particular, we feel it is in the best interests of our nation's business to strengthen our presence overseas. There is no doubt in my mind that a larger, better trained, better protected foreign staff will make significant contributions to U. S. export growth by providing better service to our clients. Placing additional people in the appropriate foreign posts maximizes ITA's and American business' ability to respond to the changing trade picture in areas such as Eastern Europe, Panama, Japan, the EC, and Canada under the FTA.

ITA's budget request includes a carefully integrated set of programs and policies aimed at improving the international trade climate for American business and industry. We intend to achieve this by:

-- Expanding overseas markets for U.S. goods and services, particularly in Japan;
-- Increasing U.S. exports in each of the next four years;
-- Strengthening intellectual property rights protection; and
-- Vigorously enforcing U.S. imports laws.

EXPANDING OVERSEAS MARKETS

In support of export expansion objectives, ITA continues to:

- implement trade promotion strategies in cooperation with other governmental agencies and the private sector which allow U.S. firms to achieve maximum success in global markets.
- formulate strategies to increase U.S. industry participation in trade development:
- identify and analyze major factors having the greatest impact on U.S. trade prospects, recommend policies and programs to deal with them, and participate in bilateral and multilateral negotiations to facilitate U.S. exports.

Throughout the year, special emphasis will be placed on expanding Japan's markets for U.S. goods and services, and responding to changes in East Europe and the EC. We plan to continue our coordinated programs of trade promotion, analysis, and policy development during FY 1991 and will vigorously pursue the elimination of unnecessary domestic impediments to U.S. export performance.

INCREASING U.S. EXPORTS

Numerous studies have demonstrated that small and medium-sized U.S. firms are among the most competitive and innovative, yet are significantly under-represented in the ranks of U.S. exporters when compared to other trading nations.

In FY 1991, ITA will continue to fund programs known to be effective for small and medium-sized firms, and will continue the transition of our domestic field offices (US&FCS) from "retailers to wholesalers" of export promotion programs. We will enhance the delivery of selected promotion services to state and local governments and will reorient our staff towards the provision of more specialized services to firms, and technical assistance to the units of government with whom we cooperate. We plan to assist the exporting community by locating our finite resources in regions showing the greatest potential for export growth.

We must continue to pursue export growth aggressively. The lower dollar, greater attention to quality in America's products, and U.S. dominance in a variety of growth industries--biotech, for example--provide a firm foundation for a powerful U.S. resurgence in the world economy. A major challenge remains to convince small, medium, and new-to-export firms of the contributions that exports of their products and services can make to their profitability and to the nation's trade position--a challenge that ITA is uniquely qualified to meet.

STRENGTHENING INTELLECTUAL PROPERTY RIGHTS PROTECTION

Foreign piracy of U.S. trademarks, copyrights, and patents steals roughly $40 billion a year in American sales.

In order to strengthen intellectual property rights protection, ITA will continue to push both bilaterally and multilaterally for upgraded standards of protection and stepped up enforcement of U.S.-held rights abroad. ITA is an important member of the U.S. team which is negotiating bilaterally with problem countries, and pursuing upgraded international standards of protection by working to bring intellectual property rights under GATT discipline. We develop and coordinate the Commerce Department's policy on:

- so-called Special 301 of the 1988 Trade Act, which addresses issues of basic IPR protection as well as those involving market access impediments;

- the TRIPs (trade related aspects of intellectual property rights) negotiations in the Uruguay Round of GATT.

ITA also is the government's primary link to industry interests for all of these activities through our lead role in the Industry Functional Advisory Committee on Intellectual Property Rights.

VIGOROUSLY ENFORCE U.S. IMPORT LAWS

ITA has statutory responsibilities to administer and enforce U.S. import laws fairly, within statutory time constraints, and in conformance with overall U.S. trade policy. ITA protects American industry from injurious and unfair trade practices by administering U.S. trade laws and agreements. Its scope of responsibility currently includes the Antidumping and Countervailing Duty (AD/CVD) laws of the United States; the U.S.-European Economic Community Arrangement; the Machine Tool Agreements with Japan and Taiwan under the President's Machine Tool Program; the Semiconductor Agreement with Japan; the Softwood Lumber Agreement with Canada; and the U.S.-Canada Free Trade Agreement.

ITA is also responsible for administering and enforcing, through March 1992, the 18 voluntary restraint agreements (VRAs) under the Steel Trade Liberalization Program along with implementing certain Statutory Import Programs and the Foreign Trade Zones Program.

PROGRAM REQUIREMENTS

The activities of the International Trade Administration are grouped into four units: Trade Development; International Economic Policy; Import Administration, and the U.S. and Foreign Commercial Service.

TRADE DEVELOPMENT

Trade Development assesses and supports the competitiveness of U.S. industries, conducts analyses on international trade and investment, and conducts export promotion programs directed toward specific industrial sectors.

For these activities, we are requesting $37,286,000 and 536 positions, a decrease of $9,018,000 and 15 positions from the 1990 appropriation. Our request includes an increase of $130,000 and one position to implement our portion of the International Economic Data System (IEDS) as required by the Trade Act of 1988. The major requirement is the development of software to allow greater access to the system. The request also includes a decrease of $4,543,000 and 11 positions related to the proposed termination of the Trade Adjustment Assistance Program. Elimination of this program is requested because U.S. trade laws provide adequate remedies against unfair import competition. There should be no special additional government assistance for firms harmed by imports. Finally, our request also includes a decrease of $314,000 and 5 positions reflecting the phasedown of activity due to the planned completion of the Uruguay Round of GATT in 1990. Any ongoing activities will be handled by remaining staff.

INTERNATIONAL ECONOMIC POLICY

International Economic Policy assists in formulation of U.S. bilateral and multilateral trade policies, monitors the implementation of trade agreements, and assists U.S. businesses seeking to trade with specific countries.

We are requesting $17,673,000 and 257 positions for these activities, a net increase of $690,000 and 10 positions over the 1990 appropriation. Our request includes an increase of $154,000 to intensify our outreach activities to assure that small and medium-sized firms are fully informed about the developments of doing

business in the European Community's single market. This increase will also allow us to provide information upon which policy decisions can be based when the inevitable issues over market access arise between the U.S. and the EC. Also, an increase of $100,000 is requested to greatly expand our information publications related to the economic restructuring in Eastern Europe and the Soviet Union. The Western Europeans and the Japanese are heavily funding trade promotion in this area, so this increase will assist U.S. firms in competing.

We are also requesting a decrease of $40,000 in the level of funding provided for the Canada Free Trade Agreement Secretariat to reflect our latest estimate of FY 1991 needs. Finally, phasedown associated with the completion of the Uruguay Round of GATT allows us to ask for a decrease of $541,000 and 10 positions related to those activities.

IMPORT ADMINISTRATION

Import Administration protects American firms from unfair trade practices by administering U.S. antidumping and countervailing duty laws, bilateral steel trade agreements, the U.S.-Canada Softwood Lumber Agreement, the U.S.-Japan Semiconductor Agreement, the machine tool arrangement with Japan and Taiwan, et al.

For these activities, we are requesting $24,421,000 and 392 positions, a net increase of $4,043,000 and 50 positions over the 1990 appropriation. Our request includes four increase proposals targeted at specific problems. An increase of $484,000 and 8 positions will allow Import Administration to continue to safeguard the U.S. steel industry against unfair foreign trade practices through the continued enforcement of the voluntary restraint agreement (VRA) program and the implementation and enforcement of international consensus agreements. Additionally, we request an increase of $1,287,000 and 24 positions to allow the Compliance and Central Records Unit/Foreign Subsidy Library of Import Administration to process its heavily increased administrative caseload in a timely manner. Further, we request $900,000 and 15 positions to implement provisions of the Trade Act of 1988 related to antidumping and countervailing duty laws. The Act came into effect in FY 1989, but Import Administration's resource needs have yet to be fully addressed, while the effects of the Act are cumulative and create increasing workload. Finally, we are requesting $160,000 and 4 positions to upgrade our staff's capability to perform in-depth economic analyses of Foreign Trade Zone (FTZ) applications and monitor FTZ activity. We are also proposing the implementation of a fee to offset the cost of this program.

We are also requesting a decrease of $38,000 and one position related to the reduction in activity caused by the expected completion of the Uruguay Round of GATT in 1990.

U.S. AND FOREIGN COMMERCIAL SERVICE

The United States and Foreign Commercial Service provides exporting advice and export promotion services to U.S. firms through a network of offices throughout the United States and in 65 foreign countries. The US&FCS develops and distributes information products and conducts trade shows and trade fairs overseas.

We are requesting $109,640,000 and 1,392 positions for these activities, a net increase of $14,446,000 and 106 positions over 1990 appropriation. Our request includes four increases which will improve the "tools" that US&FCS has to work with in promoting foreign trade. An increase of $7,912,000 and 107 positions will increase staffing in key export markets overseas. This increased presence will improve our ability to service clients overseas, and allow us to more successfully penetrate important markets for the increasing number of small and medium-sized U.S. exporters. An increase of $850,000 is also requested to improve overseas security. Armored cars and skilled drivers, residential security, and local guard forces are requirements to protect our officers abroad. Safety and security risks are real and ITA employees should not be expected to face these dangers without at least the protection afforded by this increase.

Another increase is requested to maintain the data processing capabilities of and access to the Commercial Information Management System (CIMS). The $850,000 requested will fund the purchase of a new CIMS Central Processing Unit, the purchase of associated software, and the conversion of a portion of CIMS data for use in the National Trade Data Bank (NTDB). Finally, we request an increase of $570,000 to allow us to relocate Domestic Office staff so that personal are utilized in those offices with the greatest export potential.

Additionally, we are requesting a decrease of $57,000 and one position related to the reduction in activity caused by the planned completion of the Uruguay Round of GATT in 1990.

. . . .

In the last decade of the 20th century, our Nation's status as a world leader is measured, more than ever before, in terms of our economic strength. The U.S. market is no longer the only one that matters. The U.S. today produces only 20 percent of the world's GNP while 95 percent of the world's consumers live outside U.S. borders, and these consumers are constantly becoming more affluent. In short, foreign markets have moved beyond the "simply appealing" to the "compelling". Exports are essential to ensure our future prosperity.

Our national objectives of free and fair trade require a strong commitment of resources. Our budget proposals will help achieve our national trade goals.

Mr. Chairman, this concludes my prepared statement. I will be pleased to answer any questions you or the subcommittee may have.

Mr. **Alexander**. Mr. Chairman?

Mr. **Smith**. I will yield. I will let Mr. Alexander start.

Mr. **Alexander**. Welcome, gentlemen. I think you are doing a great job, and I don't have any questions.

IMPACT OF SEQUESTRATION

Mr. **Smith**. What is the impact of sequestration?

Mr. **Farren**. It is $2.4 million.

Mr. **Smith**. How are you handling that? Is it bothering you much, or——

Mr. **Farren**. It was spread across the board. At this point, Mr. Chairman, it is not causing any particular problems. As we get closer to the end of the fiscal year, we may have to make some adjustments among various programs.

REQUEST TO OMB

Mr. **Smith**. What was your request of OMB?

Mr. **Farren**. $195,955,000, which of course is a difference of $6.9 million.

Mr. **Smith**. What did that represent? What was cut out that you wanted?

Mr. **Farren**. We had asked for additional funding for foreign staffing——

Mr. **Smith**. Foreign Commercial Service?

Mr. **Farren**. Yes, sir.

Mr. **Smith**. How much more did you ask for?

Mr. **Farren**. We had asked for $9.6 million and the submission is $7.9 million.

Mr. **Smith**. How many Foreign Commercial Service people did you ask for?

Mr. **Farren**. It was 129 positions. The submission is 107 positions, Mr. Chairman.

We had asked for additional funding for CIMS and the National Trade Data Base.

We had asked for funding for office automation. Office automation was $500,000.

We had asked for additional funding for U.S.-Canada Free Trade Agreement promotion, to assist U.S. firms in taking advantage of the FTA. That was $147,000.

We had asked for additional funds for market research that would be part of the CIMS data base. That was $500,000.

We had asked for a fund to provide for regular travel by desk officers to their country of expertise. That was $148,000.

That really goes through all the additional requests we had.

SECURITY OF FCS PERSONNEL

Mr. **Smith**. Now what is this problem about security of your Foreign Commercial Service personnel?

Mr. **Farren**. Mr. Chairman, it was originally envisioned that the appropriation of the State Department would cover all of our needs for security. We have found that that has not been the case. The State Department no longer provides replacement armored vehicles and our appropriation is lacking in that we are not able to provide for an adequate turnover of vehicles which are armored, which causes some problems for our commercial offices. Also, often our commercial offices——

Mr. **Smith**. Before you leave that, explain that.

Mr. **Farren**. In high-risk offices, we are the agency responsible for providing the vehicles on site, and the armored vehicles are not readily available to some of our staff. The vehicles that we do have, we have had to retain for longer than we would like to. The additional cost of providing for the security, the armor, and the car would be covered——

Mr. **Smith**. Well, how many places are there where you need armored vehicles?

Mr. **Farren**. To go back, one instance in which we were able to get the State Department to pick up the cost of the vehicle, for example, was Colombia. I can get back to you on the specific areas, but they are high-risk posts.

[Clerk's note.—The information requested was provided to the Committee, but due to its confidential nature was not included for the record.]

The other thing, which is the lion's share of the cost, Mr. Chairman, is our commercial offices often, as you know, are outside of the embassy, and they are difficult to protect. It usually requires some degree of sophisticated equipment to do it, since it has to be open to the public. You can't simply put up a gate and assume that takes care of it.

Very often the embassy security personnel view that as an obligation that is beyond the bounds of the normal embassy security program, and they are not as forthcoming with security provisions as we feel would be prudent. We, therefore, would like a fund that would allow us to make some of these decisions, particularly in our installations outside of the embassy compound itself.

That was the theory behind it. We have talked to the State Department about this problem. Their view is, it is a problem of funding from their perspective and the priorities that they have on security, and that is why our solution was to seek some additional resources that would give us the latitude of responding to the risk that we see existing.

GAO REPORT ON CIMS

Mr. **Smith**. You know GAO reported that you have some problems with the CIMS, the Commercial Information Management System. What can you tell us about that?

Mr. **Farren**. Sir, we do have some very significant problems with CIMS. A large sum of money has been invested in the program. The program has been through three different versions at this point, this going back to the late nineteen seventies.

We are in the process of doing two studies which are responsive to the GAO recommendation, and we have been coordinating with GAO on this. One study is the current technical capability of the hardware that we have thus far invested in. What is it capable of doing, both in terms of the hardware and the software that is in place? In other words, what do we have as a result of our investment? What can we do with it technically? Then the other part of it is doing an overview of what our customers, our constituents, need from that program.

The technical review has been conducted. We are in the process of completing the strategic review on what our constituencies need from the program, and we are going to then make an assessment of what enhancements in the program will be necessary. We hope to have that completed by April, Mr. Chairman. We would certainly then be very happy to offer a briefing to you and your staff. It would give us a much better sense of where we need to go from there.

We frankly, at GAO's recommendation and the recommendation of our own Inspector General, concluded that we need to go back to ground zero and make an assessment of the program. We started by looking at what do our constituents need and what do we currently have in place that is capable of delivering answers to those needs. Any enhancements, then, will be something we will make a determination on right after the conclusion of that review.

Mr. SMITH. Okay. I will withhold until the others ask questions. Go ahead, Mr. Rogers.

COST OF CIMS

Mr. ROGERS. I want to follow up on the CIMS. Apparently we have spent about $35 million so far on CIMS or its predecessors. Correct?

Mr. FARREN. I think with this year's appropriation it will be $39 million.

ACCESS TO CIMS DATA

Mr. ROGERS. The Kentucky office last year told me that the response time alone was extremely slow—two days—and that they had no assurance the information was even accurate. It is intended to be a direct, instant link between the exporter and the foreign markets, but according to the GAO it surely is failing that test, and we need something like this. If it is not CIMS, it should be something.

Suppose the hardware and the software is adequate. It seems to me we still lack that grassroots connection to the computer terminals. Is that not true?

Mr. FARREN. It is partially true, Congressman. Let me start off by saying CIMS by no means has lived up to its original billing. It was thought to be an instantaneous link with every one of our foreign offices, so when someone walked into a district office and said, "I am interested in what the opportunities are for widgets in Botswana," somebody could come back with a very quick response on that.

You essentially could go right out to the commercial staff in the post overseas, query them on the information being sought by the exporter, and have an immediate response; also be able to individually package information, based on marketing research that had already been done. So if we had done a research package on three leading opportunities for exporting to France, and an individual exporter had a product category that matched up with the research on the data base, we could immediately retrieve that and ask our foreign post to offer supplementary information.

Many things intervened to prevent this from occurring. One, the software really isn't up to the task, and that is one thing we went back and looked at. The hardware at this point is outdated. As you know, as computer hardware changes so rapidly, anyone coming in and looking at what we purchased a few years ago is going to tell us it is really not up to what the current capability should be.

We also ran into a couple of problems on basic linkage with our overseas offices. We have to use the State Department telecommunications system, which right then and there eliminates the capability for instantaneous communication. It has to come in through the State Department, be off-loaded and then transmitted to the Commerce Department, so you are looking at a much longer time frame. There is no real-time contact available.

The other problem was, we had not, because of budget constraints, made adequate investments in the market research and the data that should comprise the basic product that we would hand to a given businessman. As a consequence, much of the market research that we would tap is 2 or 3 years old and not all that helpful.

What CIMS has done is gotten our offices fully operational in terms of modern word processing. Essentially we are writing our word processing requirements on the back of the CIMS system, which was one of our basic questions to the technical people, as to whether or not that makes sense.

But we are by no means providing that link to the businessman. We also don't have the capabilities of what we were hoping we would be able to do, as it was originally sold as a concept, which is to put a terminal in a local Chamber of Commerce, to put a terminal in a State export office that a State Government or Department of Commerce employee would run. That simply isn't within the capabilities of the system.

Those are some of the things that we are looking at in terms of the current review. Deputy Under Secretary Wallace has also been very much involved in that, and I would welcome any supplementary comments he could make. Frankly, as we are initially looking at it, we think that there are some enhancements that we might be able to bring on-line very quickly that would increase our capability to provide services.

GRASSROOTS ACCESS TO CIMS

Mr. **Rogers**. Well, even if the system were up and running from our domestic offices to those overseas, it seems we also need equally as well a system connecting commerce's central office to the field offices in our states, because the average small businessman in one of our cities or towns isn't even aware this thing exists.

Mr. **Farren**. You are correct. What we were hoping, Congressman, is that each one of our district offices would have a terminal that would provide the linkage, and what would be offered here in Washington was simply the central database, the terminal that provided the link between all of our offices.

OUTREACH EFFORTS RELATED TO CIMS

Mr. **Rogers**. Well, even if you get it out to your State district offices, the access problem still remains. I am not knocking those offices but, you know, the small businessman out in the State is not even aware that the office is there. So I guess what I am saying is, you need outreach, local outreach through the local Chambers or other means. The State governments, of course, would be a vital link.

I guess what I am saying is, even if the technical system is in operation, you still need that human power and grassroots outreach in our communities to seek out business people who would be willing to make a product that you find needed in some foreign market. But boy, we are all riding on this thing. I mean, to the average small businessman there is no better form of assistance the United States Department of Commerce or the U.S. Government can provide than help in locating some foreign market in which to sell his widgets.

Mr. **Farren**. Mr. Wallace worked in the Texas State Department of Commerce, offering State services on exporting to local business people, and that is why his perspective has been very helpful in looking at getting some of this information out.

Mr. **Wallace**. I would just like to make two comments. One, we understand that given the limited resources available to the domestic field, we have to use multipliers. We have to seek out Chambers of Commerce, community colleges, a whole variety of different host organizations that can continue to feed this information further and further into the framework of our economic life.

NATIONAL TRADE DATA BASE/CIMS INTERFACE

The big change this year has been the creation by Congress of the National Trade Data Bank. We have been working very closely with the National Trade Data Bank in our strategic review for CIMS, because what is going to happen beginning in September is that all of the information that the U.S. and Foreign Commercial Service produces, both overseas and in Washington, will be made available through the National Trade Data Bank via CD-ROM to a whole variety of different organizations—State organizations, local organizations. There will be a number of selected vendors which will also take this information, reformat it, sort it out, so that the kinds of information we provide are instantaneously going to be available to a much broader number of users.

We are moving, through the U.S. and Foreign Commercial Service and the CIMS review, towards creating our own system which will not be instantaneously interactive with the overseas posts. We have found that there is not the real need to have a 30-second turnaround on a query. Most businessmen call in, make an appointment. We find out in advance, really, what they need.

We are going to gain through these CD-ROM disks, the ability to store an enormous amount of data that will be available at the district offices. It is our intention to have a CD-ROM reader and a new PC available in each district office by September or October, so they will be available to distribute this information, but the information itself, the various market things we do, are going to be available to a much broader category of American businesses through these multipliers which we are working on.

Mr. ROGERS. Well, I would hope so, because if you put it just in the district office, it is not going to be worth anything to anybody.

Mr. WALLACE. That is right.

BRANCH OFFICE PILOT PROJECT

Mr. FARREN. Congressman, one thing that we started this year that Mr. Wallace was involved in was the Cedar Rapids, Iowa branch office pilot project, which works with the local Chamber of Commerce there, putting an international trade specialist right into the Chamber and bringing them fully up to speed on all the resources available from the Commerce Department. Essentially, we will monitor, to what extent it offers to the Chamber, significant capability that otherwise would not exist to service the local community.

Mr. ROGERS. You say that is a test project?

Mr. FARREN. Yes, sir.

Mr. ROGERS. And that is for when?

Mr. WALLACE. It is already up and running.

Mr. FARREN. It is up and running now. It was first instituted in late 1989, September of 1989.

RESULTS OF PILOT PROJECT

Mr. ROGERS. Any results so far, that you can measure?

Mr. WALLACE. We think it is good. What we have done, we asked the Cedar Rapids Chamber to hire a person that essentially we are going to train. We have somebody in there for an unspecified period of time, probably 18 to 24 months, and the idea is, we train a person on the ground. Then this trainer, this seasoned U.S. and Foreign Commercial officer, can move on to another multiplier, and then the business community in Cedar Rapids has its own indigenous asset that can be utilized. It helps us replicate. We call them Export Assistance Centers.

When I was Deputy Director of the Texas Department of Commerce, we worked with the US&FCS office in Texas to set up a series of 22 Export Assistance Centers around the State, using Chambers of Commerce. It really didn't make any difference to us who the host organization was. They had to provide a full-time staff person, a PC, and an office. Cedar Rapids is an attempt to replicate this experience in another way. We look at it as a possible model for other States, as a way of really creating a much closer kind of multiplier than we have had in the past.

FCS PILOT PROJECT INVOLVEMENT

Mr. ROGERS. The Cedar Rapids Chamber pays the wages or salary of the——

Mr. WALLACE. Of the local person that is being trained, and we pay the salary of the U.S. and Foreign Commercial Service officer who is there.

Mr. ROGERS. Oh, you have assigned a Foreign Commercial officer there?

Mr. WALLACE. That is correct.

Mr. ROGERS. Is he assigned full-time to that project?

Mr. **Wallace**. That is correct.

Mr. **Rogers**. What does he do there?

Mr. **Wallace**. Well, essentially he is responsible for supervising the setup of the office, making certain that the full-time staff person is trained, making certain the outreach program for Cedar Rapids and all of eastern Iowa is in place, and serves as a link between that office and our district office in St. Louis.

CHAMBER OF COMMERCE OUTREACH

Mr. **Farren**. Congressman, in the seventies I was vice president of a local Chamber of Commerce, and there was a much greater identity of those offices being associate offices of the U.S. Department of Commerce. There was a real sense that they had a linkage in providing local resources from the Federal level. That, frankly, I think has been lost over the last several years. There is clearly an opportunity to get that back into the system.

NATIONAL TRADE DATA BANK/CIMS INTERACTION

Mr. **Rogers**. Well, there is no question about that. I would be interested to see how the pilot project works. I think it has a lot of potential to get the small businessman plugged into the system.

So will the National Trade Data Bank replace CIMS, or will they both be operating?

Mr. **Wallace**. What happens is the information produced through CIMS will be converted. The CIMS data will be converted into the National Trade Data Bank. We have been working with the National Trade Data Bank to develop some software which we can use in the field. So in a sense they are going to be merged. The final product, these CD-ROMS, will end up being produced by the National Trade Data Bank, but a great deal of the information that will be on those CD-ROMS will be produced through our CIMS system.

Mr. **Farren**. We are using the same media to get the information out, basically.

CIMS/NTDB RUNNING SMOOTHLY

Mr. **Rogers**. When do you figure that you will have this thing smoothed out and running, reasonably so?

Mr. **Wallace**. Well, our plan is to have this information available in the 41 district offices around the United States in September, in time for the first CD-ROMS to be utilized there. We are also examining a couple of other options, but frankly it is dependent on our resources and some potential reallocation of resources.

I think that the bulk of the information, the problem of having access to that data, which has been the major concern of our district and regional offices, will be resolved sometime this year. However, we are not sure we are going to be able to afford to put CD-ROM readers and PCs in every U.S. office this fiscal year, but I would hope we would by the end of the calendar year.

MINISTER COUNSELLOR POSITIONS

Mr. **Rogers**. Well, I would be interested in being kept up to date on CIMS and the Data Bank, as well. It is of interest to me.

Let me quickly switch subjects. Last week the Secretary indicated his desire to have an additional two Minister-Counsellor positions, one each in Brussels and in Korea. Will you be formally pursuing that with the Congress?

Mr. **Farren**. Yes, we will, Congressman. What vehicle we will use is still in question, but we will be seeking out that authority.

FUNDING FOR MINISTER COUNSELLORS

Mr. **Rogers**. Well, have you requested funds for these designations?

Mr. **Farren**. When the budget was originally submitted, we did not yet have agreement to open up an office, for example, in Brussels. Now that we do, we feel very strongly that that should carry the minister-counsellor designation. What we are intending to do is, frankly, try to make use of existing resources to scrape together the necessary funding to open up that office. We think it is absolutely critical to do that.

NEW MINISTER COUNSELLOR OFFICES

Mr. **Rogers**. So you are going to open up that office reasonably soon, then?

Mr. **Farren**. Yes.

Mr. **Rogers**. Will that require any authorization?

Mr. **Farren**. No. The authorization is in the 1988 Trade Act. All we need is consultation with the Secretary of State, which has already been done, and we are working with Ambassador Niles on actually getting the office physically set up. Director General Schwab is in the process of identifying an appropriate candidate to go in. One thing we hope to do is to get someone in with some significant policy experience, since that will be a unique requirement of that office. It is not a standard commercial office.

In terms of Korea, because there is a strong sense, particularly as expressed by Congress in the 1988 Trade Act, to heighten the level of our activities in Korea, we also have the view, as expressed by the Secretary last week, that it would be appropriate for that commercial officer to carry the title of minister-counsellor. That doesn't require funding.

It does require authorization, since the specific authority for minister-counsellors that was granted a couple of years ago specified the number of positions. The view now is that, since Congress specified the number, the Secretary of State no longer has the authority to simply increase the number higher than that specified.

Mr. **Rogers**. I have some questions relating to coal exports, but I will yield at this time.

Mr. **Smith**. Mr. Early?

TECHNICAL REVIEW OF CIMS

Mr. **Early**. Thank you, Mr. Chairman.

Mr. Farren, last year you indicated the Department was going to obtain an independent technical review of CIMS. Has that review been completed?

Mr. **Farren**. Yes, Congressman. I indicated earlier that the technical review has been concluded. We are now doing a strategic review of the services that our constituents require, that in essence are derived from the CIMS program.

CIMS FUTURE GOALS

Mr. **Early**. That is where I am getting confused. You spoke of CIMS and said that the software is outdated, that the hardware can't live up to the test. Then Mr. Wallace, in his responses to a couple of questions, suggests that it is through CIMS that we are going to get to the light at the end of the tunnel. What do you want to do with CIMS? Do you want to implement it or not?

Mr. **Farren**. Well, CIMS, as it was originally envisioned, Congressman, was sort of nirvana, off there in the distance. We plan to achieve an instantaneous communication with each one of our offices, a totally up-to-date market research base, a data base that would be able to deliver a customized package to every exporter who came in with a specific interest in a given country.

Mr. **Early**. Well, those are noble goals.

Mr. **Farren**. They are noble goals. They are perhaps beyond our capability right now.

Mr. **Early**. Why?

Mr. **Farren**. I think they are appropriate goals out into the future, and——

CIMS FUNDING

Mr. **Early**. But why are they beyond our capabilities now? Because we are not implementing CIMS? You know, you told the Chairman that, with the sequester, you cut out the CIMS money.

Mr. **Farren**. No, Congressman.

Mr. **Early**. No?

Mr. **Farren**. The reduction of the sequestered funds was spread throughout our entire budget.

Mr. **Early**. Okay. I thought you were talking about half a million dollars for automation that was——

Mr. **Farren**. No; that was the difference between what we had requested of OMB and what was approved and sent up as part of the President's budget. We had additional funds for automation procurement for ITA which was not approved within the OMB review.

GETTING VALUE FROM CIMS FUNDING

Mr. **Early**. But, aren't we getting what CIMS—you told Mr. Rogers that we spent $39 million on this?

Mr. **Farren**. What I had mentioned in terms of CIMS, Congressman—you are right—was market research that we also wanted to do and include in the CIMS data base.

Part of it—can I use an analogy? The export program that was originally set out, in the early eighties, to automate the whole export control licensing system, that had similar noble goals to those of CIMS, in terms of someone being able to just automatically send in an export license and get an electronic response back. In 1985 we were nowhere near being able to do that. That is when the Export Administration responsibility was still within ITA.

After having made significant investments, we essentially made a review of what we were capable of doing, given the investments we had made. What we then did was start implementing everything we were technically capable of doing and then we continued down the road to the point where currently the Bureau of Export Administration, which is no longer part of ITA, has many of the capabilities that were originally set out in the early eighties. In 1985 we had no way of knowing when we would be able to implement it. An enormous investment was made and the constituents weren't being served.

FUTURE OF CIMS

Mr. EARLY. Well, will we be better off down the road, when we get to where Mr. Rogers was talking about? You know, it ends with the regional offices; it never gets distributed. That happens in all Federal agencies. You keep doing a review of that, and you are going to study that and do this, and have blue ribbon committees, and we never implement anything.

Well, let me ask you, in that study that you did, the technical review of CIMS, was the recommendation to complete the system or not?

Mr. FARREN. Congressman, the technical review has been concluded. We are still in the process of completing what we call the strategic review. Now the technical capabilities of the system are X. Now——

CIMS REVIEW COMPLETION

Mr. EARLY. How long are we going to keep reviewing it? Are we ever going to——

Mr. FARREN. We expect to have that completed in April, Congressman, and then we would be in a position of coming up and laying out what the recommendation is. What we want to be able to do is to get some immediate bang for the buck out of the money that has already been invested, and perhaps more so now that we are within the system, and then lay out a plan to enhance the program further.

CIMS HARDWARE AND SOFTWARE

Mr. EARLY. I know, but I don't know how we get any bang for the buck when we say the hardware is not up to the test and the software is outdated. I mean, I don't know how you are doing anything. I think it is ridiculous to expect our personnel to do anything if we can't even keep up with modern-day technology.

Mr. FARREN. And that is precisely, Congressman, what we want to do in this review [illegible] determine how we can economically get the system up to a stage where we believe we are getting something out of our investment.

CIMS ABOLISHMENT

Mr. EARLY. So you are not abolishing CIMS?

Mr. FARREN. Oh, no. Absolutely not, Congressman. No, no.

DATA BASE REVIEW FOR CIMS

Mr. **Early**. Mr. Wallace, you said that the data base review was for the CIMS.

Mr. **Wallace**. The National Trade Data Bank, which was established by Congress, mandates that the information and material that is developed through the CIMS system be made available to the National Trade Data Bank. We have been working over the last few months with the National Trade Data Bank to design a system that would have dual utility, that would at once make all of this information which we are now collecting available to a much broader audience within the United States, and at the same time make it available in a user-friendly fashion for our own district offices around the country.

So our view is that once the National Trade Data Bank is up and running, not only should the information being developed by the U.S. and Foreign Commercial Service and the National Economic Policy on Trade Development be available, but a large number of other kinds of trade-related statistics should also be available. So the actual base of information that our medium- and small-sized exporters need is going to be substantially larger than it is now, and it is going to be made available to a substantially larger group of providers.

Mr. **Early**. But we have to get it up and running before it is out of date.

Mr. **Wallace**. Congressman, I don't——

CIMS FUNDING REQUEST

Mr. **Early**. Now your budget includes $850,000 for CIMS. For the record tell us what you are going to do with that? Do you think you could better implement CIMS with more money? I want you to be honest in your response. If the software is outdated and the hardware is not up to test, that should go on the record. Could you use more money to correct those problems?

Mr. **Farren**. Well, Congressman, what we believe is, we probably will have to spend some additional funds. But before we set out on a path of spending another dollar, we want to start from ground zero, have a technical assessment done and an assessment on what it is our clients require out of the system, and——

CURRENT CIMS ACTIVITIES

Mr. **Early**. What data isn't available that you can't start doing more, rather than saying that you are going to keep studying it?

Mr. **Farren**. I don't mean to give you the impression the CIMS or the data system that we have now is not in some respects already providing services. It is just not living up to the original expectations.

Mr. **Early**. The frustration is that it stops before it gets to the person that can utilize it. And, you keep coming in year after year with, "We are going to do more studies, we are going to do more investigation," more of this and more of that. You are not implementing anything productive.

Let me move on.

Mr. Farren. I understand your frustration, Congressman. I really do.

Mr. Early. I want you to provide for the record what you could do with additional funds to implement or speed up CIMS.

Mr. Farren. Okay.

[The information follows:]

CIMS Funding

We believe we have a good strategic direction for CIMS and it was developed independent of cost constraints. There are factors which affect how much we can do and how quickly that are not related to funding—such as the ability to acquire highly qualified contractors, span of management control over implementation activities, ability to integrate change while maintaining a reasonable operating environment, and the readiness of the user community to absorb advance technology.

SMALL AND MEDIUM-SIZED FIRMS

Mr. Rogers. Would you yield on that point, Joe, before you leave it?

In looking through the booklet, "EC 1992 Growth Markets," it has categories of products that we can sell there: electronic industry products, remote production and test equipment, hotel and restaurant equipment, and on and on and on. All of those things are products that are made by very large companies, by and large, who have their own export operations.

What we need are categories and people assigned to them, like wood products, products that are made by the small- and middle-sized companies which do not have their own export salesman overseas. I really think you need to begin focusing on specific products that the smaller business people make, wood products from my area for example. They make these things by the shipload, but they just don't have the capability to go over there and make a deal. Now IBM, for example, has its own outfit ability to sell computers and such. What do you think?

Mr. Farren. I don't disagree, Congressman, that we need to look at products that the small- and medium-sized firm can realistically put into the export market, and that in large measure is what we truly are trying to do. It is one reason, too, why we want an expanded market research base, to be able to provide individual firms with some specific information on where the opportunities are and how to take advantage of them.

NEEDS OF SMALL AND MID-SIZED FIRMS

Mr. Rogers. Well, I would think that your Kentucky office, for example—they may have already done this, I don't know could give you a listing of all of the products that are made in Kentucky, small, medium and large. I don't know whether you have an inventory of those somewhere or not already, and of who makes them. Then you just cross-check your foreign markets to see who has a need for a widget that one of these businesses makes, and get the buyer and seller together.

Mr. Farren. Let me give you some of the initial needs that we have identified by talking to small business exporters. They need assistance in locating and dealing with agents, distributors, and end users, and particularly the agents. They need somebody on the ground. As you say, they don't have the capability of cutting the deal themselves. They need product-specific market information, and this is what we have heard back from them as we have gone out and talked to them.

They need information on export financing and related assistance. They need to know, particularly, "Once I sell it, how do I finance it, especially how do I finance the cost of producing it before I ship it out and get paid?"

They need assistance on information with export licensing on anything that relates to a high tech oriented product. They need assistance in evaluating the suitability of agents, distributors, and end users, not just identifying them. They also want to know, "Is this somebody I can trust? Is this somebody who has a good reputation locally, or am I going to get branded with his bad reputation in a given market?"

They also need information on specific overseas distribution channels, that is, "What is the best way to do it? Do I operate through a wholesaler? If I am looking at Eastern Europe at this point, is there a government agency I need to be dealing with?" That type of information.

That is the best information that ITA can offer to particularly small- and medium-sized firms to get them going. You are absolutely correct. I am always frustrated when ITA is viewed as an agency that really services major firms, multinationals. They don't need us. They have their own distribution system. They have their own capabilities. They have their own people on the ground overseas. The people we are there to service, and service every day, are the small- and medium-sized firms that don't have someone in Paris or Bangkok or Sydney to find out who it is they can reliably work through in getting their product into that market.

REPRESENTATION OF SMALL AND MEDIUM-SIZED FIRMS

Mr. **Rogers**. Well, your index by product categories in this booklet is a listing of products made by large, very large concerns. As you say, they don't need you, but the rest of us do desperately need you.

Mr. **Farren**. One of our interests, Congressman, as you know, in getting someone into the EC mission in Brussels was to have someone who can be there representing small- and medium-sized firms, someone representing a firm that in fact manufactures in the United States and exports, not a firm that has an investment in Europe and doesn't manufacture here. That is the thrust of our whole effort in terms of EC 92.

SEVILLE WORLD'S FAIR

Mr. **Rogers**. Well, if the U.S. participates at Seville World's Fair, why don't you think about putting an exhibit in there, something that the small manufacturers can utilize, a place where they could perhaps show off some of their products, a lot of their products?

Mr. **Farren**. Hopefully we can. In fact, I would be happy to come up, sit down and go through that with you in your office, if you have a chance. One of our theories behind identifying larger product categories is to get suppliers. One of the problems the U.S. has had is, we relied on our multinationals to do our exporting for us, and now what we need to do is get the medium-size firms that have been suppliers to the multinationals engaged in the process.

Mr. **Rogers**. Excuse me.

WHAT ITA SHOULD BE DOING

Mr. **Early**. Everything you tell Mr. Rogers is very nice. That is what's frustrating. You have told him everything that ITA is supposed to do. We keep hearing that story every year and we never get to——

Mr. **Farren**. Well, Congressman, all I can say is that I didn't say what we ought to do. I am saying what we are doing, and——

Mr. **Early**. That is not the message I am getting. I think we are getting the message that what should be done isn't happening.

GAO REPORT ON EXPORT PROMOTION PROGRAM

Last year you told us that a review of the Export Promotion Program would be conducted to address concerns raised by the GAO about the program's cost and effectiveness. Could you give me a summary of what the results of that review were?

Mr. **Farren**. With respect to?

Mr. **Early**. The cost of the program.

Mr. **Farren**. I'm sorry, Congressman. Essentially what we did was go back and review our entire infrastructure that goes into export promotion—trade fairs, trade missions. In fact, Mr. Wallace has been very active in that as well, and can offer some commentary on it.

We have gone out to posts and tried to determine the best use of their time by eliminating trade fairs and trade missions, that frankly, they did not think were relevant to the individual market, and focusing on those that in fact could work. This cut down, in large measure, many activities because we were trying to do more than we had the capability of accomplishing. We have come up with a program now that I think actually addresses the concerns of the most likely exporters, and particularly some of the small- and medium-sized firms.

Roger, do you want to add something?

Mr. **Wallace**. There were two particular criticisms in the GAO report of the way that trade promotion activities were coordinated. The bottom line criticism was that there were a lot of trade promotion activities which were scheduled, and then a great deal of time and effort at the post was put into the organization of these events, and then they were cancelled. Therefore, you had an enormous drop-off in terms of the annual workload. There were constantly things being added.

GAO basically said that there was too long a planning period for these trade events, and that needed to be shortened, and that senior management needed to be more involved in determining what events should be cancelled. We have addressed both of those issues in the past year.

We now have a trade promotion group which meets on a regular basis. In fact, they met in my office with me yesterday, a 2-hour meeting to go over each of the trade events which has been scheduled this year. A status report on each one of them was presented and we determined where they were in trouble. In the past, one of the problems we had was that problems of trade fairs were not surfaced to the point where upper management could be able to reallocate resources, in terms of moving people around to help a trade event that was in trouble.

So we have addressed it from a management standpoint, and we have shrunk the planning time from an average of 18 months, down to about 12 months. I think we have met with the GAO, and I think that Mr. Mendelowitz has been pleased with the things we have instituted and they seem to be working pretty well. Next year, beginning Fiscal Year 1991, will be the first year that the full year will be on this new system, but everybody, from the Assistant Secretaries, Deputy Assistant Secretaries, Mike and I are always getting updates on particular alerts that trade fairs are having problems.

FCS REPRESENTATION

Mr. **Early**. I have several questions, Mr. Chairman, with regard to Foreign Commercial Service representatives.

In how many countries do we have Foreign Commercial Service representatives?

Mr. **Farren**. Sixty-five at this point, sir.

Mr. **Early**. And how many countries are not covered by the FCS?

Mr. **Farren**. I can probably give you a number that might be more relevant. A recent review indicated that only 2 or 3 percent of American exports went to countries where we did not have a Foreign Commercial Service officer located. I can give you a better sense of how many countries aren't covered.

ITA OUTREACH

Mr. **Early**. Well, I have several questions I am going to ask for the record, but does that have any relationship, as far as we are not doing anything because you are not there? I think you are well intentioned, but you don't reach people. I think we just keep talking about it. As far as the widgets, that is a perfect example. You reach out to IBM and General Motors and you don't get to Joe and Moe.

Mr. **Farren**. Well, Congressman, I can give you some sense of just the number of contacts we have, which run 120,000 to 150,000 counseling sessions. On EC 92 alone we have responded to literally thousands of inquiries, providing information on the market, so I think you may be underestimating the impact that we are having. I am more than happy to acknowledge that there is more that we need to do.

SMALL BUSINESS DISTRICT COUNCILS

Mr. **Early**. It isn't the inquiries and the responses. It is what are the results from the responses. I mean, how many small businesses under $1 million have you really helped?

Mr. **Smith**. How are you interfacing with the SBDCs?

Mr. **Farren**. We are interfacing, Mr. Chairman, through the Small Business Administration, and that is still guided by a Memorandum of Understanding that was negotiated a couple of years ago. We are in the process of talking with Susan Engleiter to, frankly, increase our interaction, and we have talked specifically of how to make better use of SBDCs.

Mr. **Smith**. You see, a lot of what Mr. Rogers and Mr. Early are talking about, I think these are people that SBDCs reach or they find their way to SBDCs. They don't go to the Chamber of Commerce. They don't belong to the Chamber of Commerce. They are some little inventor that got a great idea and he doesn't know what to do with it. He goes to the SBDCs. They help him with a marketing study and some other advice, and you are not going to reach them very easily that way, even.

One of the best outreach programs we ever had, and partly we based the SBDCs on it, was in St. Louis. We gave the Small Business Administration some years ago the money. They went out and went down the street to find out who the business people were. They couldn't get it out of the yellow pages. They found out there were numerous people out there that had a product that could be sold overseas. They didn't know they could sell it overseas. What they needed was somebody just to take them and give them just a little help, get them down to a bank where there was an officer that made those kinds of loans and would finance the operation.

Those people are out there, but you are just not quite reaching them, are you, with your system?

Mr. **Farren**. Well, we obviously, Mr. Chairman, could do a better job. I testified 2 or 3 months ago before Chairman Barnard's committee, Government Operations, talking about US&FCS specifically. There were four of us on the panel, including someone from SBA, the State Department, myself, and GAO.

Alan Mendelowitz summed it up, and he was complimentary of the management, complimentary of our goal—this is the GAO person responsible for international programs—complimentary of the planning we had done. He defined it as a problem—after he studied this for 6 or 7 years at this stage—fundamentally of resources. I have to say that is why the increase that we have asked for in the U.S. and Foreign Commercial Service will have a dramatic effect on our ability to deliver information on foreign markets, and we are attempting to reallocate resources within our domestic staff in order to do much of the same.

Mr. **Smith**. Well, I——

Mr. **Farren**. There is a limit to what we are capable of doing in terms of outreach. We should be doing more.

SBA DATA BASE FUNDING

Mr. **Smith**. It has been a long, hard road, because we gave $1 million a year to the Small Business Administration to put together a data base for these people. For 2 or 3 years they didn't use it at all. I didn't understand that, but somehow everything—there is a lot to be done here to pull everything together.

Mr. **Farren**. Absolutely.

COMPUTERS FOR SMALL BUSINESS DISTRICT COUNCILS

Mr. SMITH. And these computers you are talking about, some of those might ought to be in the SBDCs.

Mr. FARREN. I don't disagree. Mr. Chairman——

Mr. SMITH. There isn't one everywhere, but I mean where there is one, that might be a good place for it.

Mr. FARREN. One thing which we are doing which will be very helpful in an SBDC setting is putting together software on how a small business firm can assess their capability to export. Once that software is created, it will allow people not all that sophisticated in export markets to be able to sit down and walk through with a small business what their product is, what their size is, what their current business is——

BETTER ITA-SBDC COOPERATION

Mr. SMITH. Well, you may be duplicating to some extent what SBDCs are doing, but maybe they are not serving everybody either, but you need to do some more coordinating, it seems like to me, with SBDCs.

Mr. FARREN. We recognize that as something very critical in terms of working with SBA.

Mr. SMITH. Yes?

Mr. ROGERS. I would like to ask a question about coal exports when we come back, but we had better go and vote.

Mr. SMITH. We have two votes, so it will be 10 or 15 minutes.

[Recess.]

PLANS FOR EASTERN EUROPE AND JAPAN

Mr. SMITH. While we are waiting, the other two have questions, more questions, I think, but tell us what your plans are with regard to Eastern Europe and Japan. Are you going to reorganize there?

Mr. FARREN. Mr. Chairman, in terms of Japan, we will be adding staff to our Japan office, not only in the Tokyo office but also Osaka, the consulate office there. With respect to Eastern Europe, we are going to be adding staff to Eastern Europe. In fact, a fair proportion of the total number of the increase of 107, 32 all told, would be going into Eastern Europe.

FOREIGN PERSONNEL MOVEMENT

Mr. SMITH. Are you taking any out of any place, or are you just adding?

Mr. FARREN. At this point we are adding, and there may be some minor adjustments in terms of shifting, particularly as we try to have senior people available to go in and start posts. We may move some people around in terms of Europe, but we don't anticipate any actual decrease of a significant nature in any one of the posts.

Mr. SMITH. I see.

Mr. FARREN. In fact, we have gone through, Mr. Chairman, frankly and looked at—well, let me back up a step. We did an analysis based on all the standard commercial concerns—total amount of exports, current workload, anticipated opportunity for exports—

and came up with a number of posts where, in that strictly objective sense, it would probably call for a reduction, or in some cases, an elimination of the post. We looked at virtually all of those situations and concluded that it was not appropriate for us to cut or eliminate posts because it was very significant for us to have people on the ground and present.

For example, if you look at it totally objectively, it doesn't make sense for us in pure commercial terms at this moment to have someone in Warsaw. We do, because it is critical for us to have a presence in Poland, and in fact we are going to be increasing our presence, but if you look at it in terms of the current amount of trade, it probably would make more sense to add someone to West Germany or to France or to Spain.

DECISION ON PLACEMENT OF FOREIGN PERSONNEL

Mr. **SMITH**. Well, how do you do that? Do you mean if there isn't enough trade, you add people there so that you will get more trade?

Mr. **FARREN**. Well, that is what we are doing in Eastern Europe right now, Mr. Chairman, yes.

Mr. **SMITH**. You didn't mean that if there was more trade you would add more people?

Mr. **FARREN**. In some areas where we see an opportunity for more trade, some of these increases would go into those posts, but we are responding——

Mr. **SMITH**. Well, it doesn't seem like to me that the two necessarily match. It might be that where you have less trade is where you need more people.

Mr. **FARREN**. And that is why we are putting 32 people into Eastern Europe.

Mr. **SMITH**. I see, yes.

Mr. **ROGERS**. Yes, because of the long-term opportunities that exist there.

Mr. **SMITH**. Mr. Rogers?

FOREIGN PERSONNEL MOVEMENT IN FY 1990

Mr. **ROGERS**. Well, that is in Fiscal 1991. Did I not understand the Secretary the other day to say that he is switching some of them around in Fiscal 1990?

Mr. **FARREN**. That is why I mentioned, Congressman, that in the short term, in order to get posts opened, we would make some adjustments and move people around, but we don't anticipate any real reduction in the staff of any given office as a consequence of it.

For example, in Panama we moved someone in on a TDY shortly after the fall of Noriega, and the U.S. presence there, in order to get that office up and running again. That person, frankly, was someone who had served in Panama in the past, and they were located in Europe at the time. We sent them in there on a temporary assignment to get the office up and running. We are going to be doing similar things in terms of Eastern Europe, in order to get through this Fiscal Year.

BUSINESS GROUPS TO EASTERN EUROPE

Mr. **Rogers**. Do you have any sort of program where you take, for example, some American producer-type people to Hungary, and let the Hungarians learn how we produce, as well as open up some market potential there?

Mr. **Farren**. The Secretary has already taken two business groups over to Eastern Europe, one group to Hungary and Poland and the second group to Poland. We just had a telecommunications trade mission go over both to Hungary and Poland, with the specific—exactly what you are suggesting needs to be done, with that specific objective.

Mr. **Rogers**. Well, it seems to me you could do that wholesale, not just one group but in wholesale numbers.

COAL EXPORTS TO JAPAN

Let me ask you about coal exports to Japan. Last week the U.S.-Japan Energy Working Group experts met in Tokyo. Was there any indication the Japanese are wanting to improve their coal imports at this time?

Mr. **Farren**. No, Congressman. The response back at that meeting was that there is no anticipated increase. Frankly, I am very disappointed in the outcome of what was known as the Reagan-Nakasone coal agreement, primarily because coal exports, as you know, Congressman, have gone down since the agreement.

Mr. **Rogers**. That's right.

Mr. **Farren**. And we have pressed them to increase. The only positive comment, frankly, that comes back from the industry is, without this constant monitoring of the agreement by Commerce, exports probably would have gone down more than they did. In discussing some of the opportunities for increases, particularly since the Japanese are bringing new electric generating capacity on-line and will have an increased need for coal, I understand our efforts last week to get a clear commitment that the additional coal will come from the United States were not successful. We will continue to raise it with them.

Their assertion is that they are making these decisions purely on a commercial basis of price and availability of specific types of coal they need. I view it as a more strategic approach on their part to diversify their sources, and also take advantage of specific investments that Japanese firms have made in coal-producing countries.

UNITED STATES-JAPAN BUSINESS RELATIONS

Mr. **Rogers**. Maybe we should make our decisions based purely on commercial interests when we station our military there to protect their shipping lanes. Maybe we should think more on strictly commercial terms, as they do.

Well, as you say, the coal imports into Japan have gone down since the agreement that they entered into with President Reagan. It is no wonder, because at the time the working agreement said, "We will endeavor to try and bring in possibly more, one of these days, if it is possible." I mean, that is the kind of language the Secretary of State allowed to go into a working agreement with another competitor, and at the time the Secretary of Commerce was not even invited to go on the trip, and a bunch of us were madder than a hornet about that. I still am.

That is why we have no agreement, in fact, with Japan to increase coal exports to Japan. I mean, we just let them snooker us in the easiest sort of way.

Seventy percent of their coal imports come from Australia, and the Australian coal industry is subsidized, as they admit. In fact, when this subcommittee was down there in Brisbane a year or two ago, I talked—he didn't know at the time my particular interest in this—but I talked with the elderly gentleman who helped the Australian Government build the railroad lines internally from the seacoast to the coal mines at government expense, and operated the shipping of coal out there at government expense. I mean, we can't compete against that kind of subsidization.

If Japan insists upon going strictly by their commercial interests and we are having to deal with that kind of competition, then I suggest we evaluate the way we do business with Japan and other areas. Is that a legitimate request?

Mr. **Farren**. Congressman, it has been my view for some time that the U.S. has to look at its commercial interests with much greater concern than we have in the past, so I believe certainly that the commercial concerns need to be put front and center.

JAPAN'S RESPONSE TO U.S. TRADE CONCERNS

Mr. **Rogers**. Well, the world has come around to where we wanted it. We said all the while the cold war was going on, "Let's quit fighting on the battlefields, preparing for war. We will meet you in the marketplace instead of the battlefield, and we will whip you there." Well, that world is here now. We finally got our wish, except we get clipped.

Mr. **Farren**. I am hoping, Congressman, that in the last couple of weeks some of that message has been delivered, specifically to the Government of Japan. Secretary Cheney, as you know, when he was over there—for the first time in my recollection and the first time in the recollection of anyone I have asked this question to—we found the Secretary of Defense saying that trade issues mattered, and the failure of Japan to be responsive to U.S. concerns on trade would have a significant impact on other areas of concern and cooperation. I think the President's meeting with Prime Minister Kaifu over the weekend was another example of this Administration trying to bring the commercial and economic concerns front and center, and sending that signal in very direct terms to the Government of Japan.

UNITED STATES-JAPAN TRADE AGREEMENTS

Mr. **Rogers**. Well, we have been sending that signal and have sent that signal. I have been over there and preached that. You know, "you hit the horse over the head with a 2 by 4" is a favorite saying. They have been hit over the head so long that it is no longer painful, and we have beat that 2 by 4 to a matchstick and it doesn't do any good. Sending signals doesn't work. It takes action, and it takes absolute quid pro quo on both sides.

We have something they need; they have something we need. We either make a trade and stick by it, with concrete language that can be enforced in the International Court of Law and the other agreements we have entered into, or we don't. I am just tired of it. I wish there were a way that our Government would finally just say, "This is it. We are tired of sending messages. Here is the deal. If you don't like it, lump it. We will go elsewhere."

Speech. Thank you, Mr. Chairman.

Mr. SMITH. Mr. Early?

STATE DEPARTMENT INVOLVEMENT IN TRADE

Mr. EARLY. Following up on Mr. Roger's question about commercial interests front and center, why don't we just get rid of the State Department? Then we might get our commercial interests front and center.

Mr. FARREN. I'm sorry, Congressman. I didn't understand you.

Mr. EARLY. We do our commercial thing—trade negotiations, this and that, and the State Department gets involved, with diplomacy rather than emphasizing commercial interests. But if we want to get to the bottom line and try to increase sales, have the State Department—get the State Department out of the way.

ATTAINING CIMS GOALS

Mr. Farren, and Mr. Wallace, you know we try to stay within 10 minutes, and on the CIMS it would appear that I was cutting you short. I didn't mean to be cutting you short. I would like you to expand on the record on how we can implement that as quickly as possible, if you think that it can attain the goals, and if you do, how we get there.

Mr. FARREN. Congressman, I would be happy to sit down in your office and talk to you about it in more detail.

CEDAR RAPIDS PILOT PROGRAM

Mr. EARLY. Fine. On the Cedar Rapids model program, it just seems so practical to put your agent in the Chamber of Commerce. Does the Chamber of Commerce in Iowa give them—how many people do you have there?

Mr. WALLACE. The Chamber of Commerce in Cedar Rapids is providing an office and one person that is full time, who is being trained to be the director of the Export Assistance Center, and I think there is also a part-time clerical person being provided.

Mr. EARLY. Provided by whom?

Mr. WALLACE. By the Cedar Rapids Chamber of Commerce.

Mr. EARLY. Okay, so your agency isn't paying the rent or those salaries?

Mr. WALLACE. No. All we are providing is the salary for the commercial officer there, and we have made some commitment in terms of linking them up with the system that connects our domestic agencies.

ADDITIONAL PILOT PROGRAM INFORMATION

Mr. EARLY. For the record why don't you expand on just how that is working? That just seems so practical. If you are talking about doing away with bureaucracy, put them where the action is. These local people can take advantage of what he knows.

Mr. **Wallace**. In fact, we had a meeting last week with the GSA, looking at a kind of global solution to the possibility of co-locating more domestic offices in areas where there are trade centers or where cities have commercial activities revolving around trade. You end up getting a synergism of all sorts of multipliers that work closely together to deliver the services.

GSA INVOLVEMENT IN PILOT PROGRAM

Mr. **Early**. But why do you have to go to GSA? Why don't you just do it?

Mr. **Wallace**. Because they are our landlord.

Mr. **Farren**. They are our landlord, once you get outside of Washington.

Mr. **Early**. Well, you don't want any space if you are going to go to the Chamber of Commerce; there is no space requirement. You don't have to rent space. That pilot in Iowa, it just seems that that is where it might work a little better. If you go to another agency, they have to justify their existence, and they will study it and restudy it and we won't do anything.

Mr. **Farren**. They do, in the rent we pay, Congressman, justify their existence.

Mr. **Early**. Oh, they study the rents, and then they say, "We haven't got enough, so we'll take all our space and divide it into how much we need," and that is what they charge you?

[Laughter.]

Mr. **Farren**. We have been successful, for example, at getting our office into the World Trade Center in Boston. We are trying to get our offices into, as Mr. Wallace points out, areas of greatest benefit. We do have to negotiate with GSA, precisely as you pointed out. When we pull out of a Federal building, they lose the rent we are paying and that causes problems for them in terms of their budget, which is why they are not too happy when we pull out of Federal buildings.

SBA-ITA COOPERATION

Mr. **Early**. Just one final comment, Mr. Chairman.

On help for the small business in foreign trade, I don't know whether it should be the SBA or it should be your agency. I personally don't think it should be both of you. I don't know which one it should be, but I think we are not getting as much results with two. If they had one or the other, I think we might do better.

Mr. **Farren**. Congressman, I think the administration agrees with that point. I have the view that the International Trade Administration obviously is the best means of getting services out to the private sector, particularly since we have the Foreign Commercial Service, which is the very unique product that we have to offer to the private sector.

Frankly, as I say, I am frustrated when people view ITA as servicing huge Fortune 500 multinationals. Believe me, our constituency is small- and medium-sized firms. They are the ones who need the services, and I think we can clearly demonstrate that they are the ones that we are directing our projects to.

Mr. **Early**. And we will only get there if we are.

Thank you, Mr. Chairman.

Mr. **Smith**. Well, of course, before we leave it, SBDCs do a lot besides getting into foreign trade. I mean, the guy has to get started first, get his product on the market, get enough market in the United States so he can get his price competitive. Then he is ready to go overseas.

Mr. **Farren**. Mr. Chairman, I don't disagree with that at all. There is clearly a major role for ITA and SBA to share in.

Mr. **Smith**. So in some way you have to work together.

Mr. **Farren**. Yes, absolutely.

Mr. **Smith**. At a certain point.

Mr. **Farren**. Yes.

Mr. **Smith**. Okay. Thank you. We will have questions for the record, but we have to move on.

Mr. **Farren**. Thank you, Mr. Chairman.

[The following questions were submitted to be answered for the record:]

Questions Submitted by Congressman Smith

Status of Authorizing Legislation

QUESTION:

What is the status of your authorizing legislation needed for FY 1991?

ANSWER:

Our Office of the General Counsel has proposed new authorizing legislation, the Export Promotion Reauthorization bill, and it is currently undergoing Departmental review. As soon as it clears it will be forwarded to OMB for further review and when in final form forwarded to the Congress for action.

Trade Adjustment Assistance

QUESTION:

You are again proposing to eliminate the Trade Adjustment Assistance Program. Are there any new reasons for your proposal this year?

ANSWER:

No. The Administration believes that U.S. trade laws provide adequate protection against unfair import competition. Firms harmed by imports should not be entitled to additional special government assistance.

Trade Adjustment Assistance

QUESTION:

What is the total amount available for this program for FY 1990 and what are the sources of those funds?

ANSWER:

The following chart shows funds available for the Trade Adjustment Assistance Program during FY 1990. This chart identifies $13.1 million available for the TAA program. Funds available are derived from the FY 1990 appropriation, TAA recoveries, unobligated (carryover) TAA administrative and grants funds from FY 1989, and the unexpended balance held by TAAC's as of 10/01/89.

New FY-90 Funds Appropriated	$ 4,605,000
Less Gramm-Rudman-Hollings Sequestration	(62,000)
	4,543,000
Available from Unobligated ITA Carryover	737,000
Available from Prior or Current Year Deobligations Recovered by ITA	774,000
Unexpended Balance Held by TAACs	7,018,000
Total Funds Available	13,072,000

Trade Adjustment Assistance

QUESTION:

Will it be necessary for any of the TAAC's to initiate close-out procedures because of the lack of funds?

ANSWER:

While some TAAC's have expressed their concerns about the level of funding provided for FY 1990, all available funds appropriated for the TAAC's have been awarded. Through the first quarter of FY 1990, the TAAC's, in the aggregate, spent at a rate which would enable them to remain in operation through the end of the fiscal year. ITA will be able to update this forecast once it receives the second quarter spending reports, which are due in early April.

Allocation of Resources

QUESTION:

I understand that you are reassessing the reallocation of your foreign and domestic resources. What are the concerns that have prompted this reassessment?

ANSWER:

There was a major change in exchange rates from 1985 through 1988 which we met by trying to retain programs which had been in place. As the rates have appeared to stabilize, it is time to reassess whether our programs are located appropriately so we can assist U.S. businesses to maximize their exports.

The last major review of the allocation of overseas resources took place in 1984 and the results were implemented at the beginning of 1985.

The last major review of the allocation of domestic resources took place in 1983 and the results were implemented in 1984.

District Office Reallocations

QUESTION:

The budget request includes an increase of $570,000 to reallocate the district office staff. Will these funds be used for a study or for relocation of personnel?

ANSWER:

These funds are for the one-time expenses necessary to relocate approximately nineteen trade specialist positions. They will be reassigned where scarce resources can be most effectively placed to reach the largest number of small and medium-sized firms with significant export potential.

Regional Directors

QUESTION:

Is there a need for the nine regional managers in US&FCS's domestic staff structure? Is this additional bureaucratic layer necessary?

ANSWER:

ITA has a new domestic regional structure effective January 8, 1990. Presently we have 7 regions.

These seven regions will result in improved management of domestic operations along geographic trade lines.

We continue reviewing our domestic office field structure.

Management Program Reviews

QUESTION:

I understand that GAO and others have questioned the effectiveness of the US&FCS's in-house evaluations known as Management and Program Reviews. Do you still plan to complete eight of these reviews as indicated on page 123 of the justifications?

ANSWER:

Preliminary indications from the Strategic Review suggest we need to refocus our reviews to increase emphasis on program issues and on addressing management priorities. We are reassessing these reviews and do not expect eight on-site reviews this year, however the importance of assessing both our programs and our management controls are a priority.

Antidumping and Countervailing Duty Caseload

QUESTION:

You are requesting an increase of $1,287,000 and 24 positions to process an increasing number of antidumping/countervailing duty cases. What is the workload in this area for FY 1989, 1990, and 1991?

ANSWER:

We have experienced an ever-expanding workload of orders and suspension agreements subject to administrative review. By FY 1991, our Import Administration unit estimates that the total number of orders will have grown from 245 in 1988 to 365, an increase of 49 percent.

At the end of FY 1989, Import Administration was conducting 288 administrative reviews, or 5.88 reviews per analyst. Import Administration estimates that there will be 467 in progress at the end of FY 1991. During FY 1990, and thereafter, we will be conducting administrative reviews of two large families of orders, antifriction bearings and industrial belts. The nine antifriction bearing cases alone are conservatively estimated to encompass over $900 million in entries subject to review, and Import Administration has already received clear indications that at least twenty-seven major bearing producers will request reviews. These large additions to our workload will make it even more difficult to meet the statutory deadlines in all reviews.

Associated with the increase in the number of administrative reviews are proportionate increases in collateral activities. Among these are scope requests and court remands. Commerce has a legal obligation to provide full and complete public records, resolve information disputes, and ensure release of proprietary information under administrative protective orders. In addition, Import Administration must coordinate with Customs field offices on duty deposit and assessment rates and issues. Import Administration personnel provide assistance to the

Office of the Chief Counsel on litigation arising from administrative reviews and prepare redeterminations remanded from the Court of International Trade. Many of these redeterminations require as much work as administrative reviews.

Implementation of 1988 Trade Act

QUESTION:

You are also requesting an increase of $900,000 and 15 positions to implement changes to antidumping and countervailing duty laws. What specifically are those changes and under what authority are you proposing to make them?

ANSWER:

The requested increase is based on changes already made in the 1988 Trade Act. We are not proposing changes, but are implementing those changes which have already taken place. The changes referred to are those incorporated in the 1988 Trade Act such as Section 1312: Actionable Domestic Subsidies, Section 1313: Calculation of Subsidies on Certain Processed Agricultural Products, Section 1316: Dumping of Products from Nonmarket Economy Countries, Section 1318: Input Dumping by Related Parties, Section 1319: Fictitious Markets, Section 1321: Prevention of Circumvention of Antidumping and Countervailing Duty Orders, and Section 1327: Leases Equivalent to Sales.

All of our Import Administration unit offices involved in administration of the unfair trade statutes are affected by the 1988 Trade Act. Although the 1988 Act came into force in FY 1989, Import Administration's resource needs arising from the Act have never been addressed. Furthermore, the effects of the Act are cumulative, e.g., some provisions first applied in one investigation or review will be applied in all future reviews of that case. As of the end of FY 1989, Import Administration was conducting 288 administrative reviews and 24 investigations in antidumping and countervailing duty proceedings.

Steel Increase

QUESTION:

You are requesting an increase of $484,000 and 8 positions to achieve an international consensus on steel trade practices and meet shorter deadlines for processing requests to import steel due to short supply. What do you hope to achieve with negotiations with other countries on steel trade practices?

ANSWER:

The bilateral consensus agreements on steel, recently negotiated with the U.S. major steel trading countries, are the first step in addressing the causes of unfair or trade-distorting practices in the steel sector. While bilateral agreements represent progress, the ultimate objective is to achieve a multilateral consensus agreement with steel trading countries. Through negotiations with countries not already committed to bilateral agreements, negotiators ultimately hope to add these countries to an overall multilateral consensus agreement. If negotiators are unsuccessful in drawing these other countries into a multilateral consensus agreement, negotiators, at the very least, hope to secure bilateral consensus agreements with these countries.

The existing bilateral consensus agreements contain two major elements: (1) the elimination of unfair trade practices, such as subsidies on steel exports to the United States; and (2) the opening of foreign markets by eliminating tariff and non-tariff barriers. These major elements represent policy objectives on steel trade practices set forth in negotiations with all countries including those not already comitted to existing bilateral consensus agreements.

The resource increase of $484,000 and 8 positions is requested primarily to support the Department's efforts to ensure that major trading partners comply with the bilateral consensus agreements. Such compliance-oriented responsibilities will include analyzing: (1) existing subsidy programs and practices in each of the covered countries to determine if existing export and domestic policies and programs are consistent with the terms of the agreements; and (2) market access issues in covered countries to determine if identified non-tariff measures are consistent with the agreements. Additional responsibilities include the development and implementation of rules and procedures for dispute settlement panels, identification of panelists, and the investigation and verification of specific alleged violations of the agreements.

Our Import Administration unit within the International Trade Administration will also implement congressional initiatives regarding short-supply provisions in the new VRAs. In the past, the short-supply program did not have statutory rules and regulations, and there were no time limits for making decisions. On the average, it took the Department more than two to three months to complete short-supply cases. Under the new VRAs, the Department must make decisions in either 15 or 30 days, depending on domestic supply conditions.

These additional responsibilities have greatly strained resources. Existing staff and financial resources are dedicated to executing the basic responsibilities of the existing bilateral consensus agreements in addition to other ongoing programs, i.e., machine tool VRAs, tungsten VRA. Without the requested resources, Department officials will be forced to prioritize policy objectives outside of the immediate scope of the existing agreements. Lack of additional resources could significantly limit efforts to negotiate with countries not already committed to bilateral consensus agreements.

OAC Staff Reallocation

QUESTION:

What plans do you have to reallocate staff from the Office of Agreements Compliance when the President's steel program (VRAs) expires next year?

ANSWER:

We are committed to eliminate unfair trade practices in the steel sector. The bilateral consensus agreements currently in effect with U.S. major trade partners represent the first step in addressing the causes of trade problems in the steel sector. We are aggressively pursuing multilateralization of the commitments made under these bilateral agreements to stronger discipline in subsidies and market access. Upon expiration of the VRAs, the steel industry will still be able to seek relief under the antidumping and countervailing duty (AD/CVD) laws. If unfair trade cases are filed, the steel expertise developed in the Office of Agreements Compliance will be critical to investigating a wide range of steel products covered by the AD/CVD petitions.

It is also essential to note that OAC's primary function is to administer suspension agreements resulting from AD/CVD cases. OAC's broad range of functions have grown to include administration of: (1) all AD/CVD suspension agreements; (2) all bilateral steel consensus agreements; (3) all steel VRAs; (4) machine tool VRAs with Japan and Taiwan; (5) the tungsten VRA with the People's Republic of China; and (6) the monitoring of brass sheet and strip and color television receivers under the persistent injurious dumping provision of the Trade and Tariff Act. OAC continues to perform the original tasks for which it was created, and also assumes an ever-increasing proportion of Import Administration's growing AD/CVD workload.

International Economic Policy

QUESTION:

You are requesting a total of $254,000 for the Regional Economic Policy office to help U.S. firms take advantage of the establishment of a single market in Europe and economic reforms in Eastern Europe and the Soviet Union. What specific help is needed to assist U.S. firms in these areas?

ANSWER:

To help U.S. firms take advantage of the establishment of a single market in Europe, we will do the following:

- A series of 10-20 "How To Do It" publications aimed at helping the smaller U.S. company expand business in the European Community, i.e. "How to Improve Your Distribution Structure in EC 1992".
- Expand the outreach program to reach 25,000 U.S. companies interested in opportunities in the EC 1992 program.
- Support several specialized outreach and problem resolution initiatives on standards, testing, and certification regarding the 1992 program.
- Develop a comprehensive trade barrier impact analysis and trade action program in support of our export counseling activity.
- Expand the EUROPE NOW program, providing more extensive export counseling to new-to-market firms to exploit enhanced export opportunities in Europe.

To help U.S. firms take advantage of the economic reforms in Eastern Europe and the Soviet Union the following are required:

- An enhanced publication program to include the following: Overseas Business Reports (OBR's) on how to do business in the USSR and Eastern Europe; investment and countertrade guides; expanded information services; and Foreign Economic Trends Reports on a timely basis.
- An analysis of the effect of Most Favored Nation Status on U.S. imports from the Soviet Union and U.S. exports to the Soviet Union, an analysis of the trade agreements practical

consequences for business, a new analysis of the Soviet market, as well as new advice for doing business in the USSR for the companies seeking to enter the Soviet market for the first time. In addition, an analysis of joint ventures concluded after three years along with advice on negotiating and operating a joint venture.

- Greater involvement in Business Council meetings/programs both in the U.S. and abroad. Specifically, we can then participate actively in all meetings and activities of the U.S.-USSR Trade and Economic Council (USTEC), as well as the six East European Business Councils.
- Use Joint Economic Commission programs and activities to support greater private sector activity. For example, we will fund trips for participation in the twenty meetings per year of the five industry sector groups organized under the U.S.-USSR Joint Commercial Commission (JCC), as well as the three to eight additional trade promotion, business facilitation and other events which the JCC is likely to establish.
- Develop on-the-spot market information and keep current with new legislation and procedures in this fast changing commerical environment to ensure that U.S. firms and U.S. Government take advantage of opportunities in the USSR and Eastern Europe.

Rationale for Deputy Assistant Secretaries

QUESTION:

In a January 1989 report, GAO recommended that ITA be reorganized to reduce the number of operating units and to increase accountability and managerial control. Why does the ITA need 23 deputy assistant secretary positions when overall staffing has declined in the last few years?

ANSWER:

Deputy Assistant Secretary positions are established in recognition of the importance of their negotiating and representational duties rather than upon their management responsibilities. Deputy Assistant Secretaries have frequent personal contact with high ranking officials of states, foreign governments, and private industry. It is essential that ITA's representatives have a personal rank commensurate with these officials and reflective of the importance of the subjects they discuss.

Recommended Reorganization of ITA

QUESTION:

What action have you taken to streamline ITA's organizational structure since the GAO report was issued?

ANSWER:

ITA established a task force, under the direction of the Deputy Under Secretary, to undertake a comprehensive review of trade event planning and management.

The task force has completed its review and has recommended improvements in trade event planning, management and implementation and has defined the roles and responsibilities of each ITA unit.

The recommendations have been adopted by ITA and are currently being implemented for the FY 1991 calendar of trade events. It is expected that these steps will improve the export promotion program (with particular emphasis on streamlining operations and enhancing productivity) and will obviate major reorganization.

ITA Detailees

QUESTION:

How many detailees does ITA provide to other agencies and at what cost?

ANSWER:

We currently have one employee detailed to another agency. Ruth Waller, a Schedule C, Grade-13 employee earning $44,027 a year is detailed to the White House.

Cooperative Agreements

QUESTION:

What plans do you have to develop a cooperative agreement for sharing some of your domestic export counseling staff with the Bureau of Export Administration and the Small Business Administration?

How much could be saved if duplicative services were provided through a cooperative approach?

ANSWER:

We have cooperative agreements with BXA and SBA which we are refining. With regard to both agencies we share resources and attempt to avoid duplication of efforts. Office of Domestic Operations (ODO) staff is presently providing export counseling assistance in the domestic offices for SBA and BXA referrals.

We have no way of assessing the actual cost savings of a greater cooperative approach.

Chapter 19 Panels

QUESTION:

How much have you received from the Office of the U.S. Trade Representative for providing staffing support to the Chapter 19 panels? Have all of the funds received from the USTR been applied for this purpose?

ANSWER:

As you are aware, none of the funds received from the U.S. Trade Representative provides for compensation to the permanent staff of the Canada FTA Binational Secretariat. The funds from the U.S. Trade Representative's office pay for panel expenses including: payment of compensation for panelists and their assistants; travel expenses; Federal Register printing; and photocopying; and mailing of documents. The U.S. Trade Representative's Office has been allocated $1 million for fiscal year 1990. Under a Memorandum of Understanding between the Department of Commerce and USTR, Commerce will bill USTR on a quarterly basis for actual expenses incurred for Chapter 19 panels. For the first quarter of fiscal year 1990 the FTA Binational Secretariat has obligated $95,000 of the $1 million allocated. Expenses are expected to increase sharply during the latter part of the fiscal year due to increased case load.

The Canada FTA Binational Secretariat has created a separate accounting code for funds received from USTR in order to ensure that only those expenses associated with Chapter 19 are charged to USTR.

QUESTIONS SUBMITTED BY CONGRESSMAN ALEXANDER

Domestic Office Relocations

QUESTION:

The budget requests an increase of $570,000 for use in relocating staff of the U.S. Commercial Service as a part of realignment of offices. This involves the reallocation of 19 existing positions of the U.S. Commercial Service.

a. Is it the Administration's intention to close or reduce the status of any U.S. Commercial Service office in any state which has only one such office?

b. Will the Administration's staff reallocation program increase the staffing of U.S. Commercial Service offices in states which have only one such office and where staff vacancies have been left unfilled in recent years?

c. What criteria will be used in determining where the 19 positions will be reallocated and what weight will be given to each criteria?

d. Please provide, for the record, the geographic locations where you expect to assign each of the 19 positions which are to be reallocated and, in each case, indicate the number of staff already allocated to each of these locations and to the state in which these locations are situated.

ANSWER:

It is not our intention to close or reduce the status of any District Office. The specific impact the relocations will have on any District Office is difficult to forecast at this point. The current recruitment drive is intended to alleviate a number of staff shortages that exist in certain District Offices. Given the fluidity of the situation, and given our desire to run our resource allocation model with the latest possible data, we are unable to provide more specific information until more of the FY 1990 recruitment drive has been completed. There are no plans for opening or closing District Offices at this time.

The allocation of resources is based on the equitable assignment of available field staff to serve the largest number of small and medium-sized firms with significant export potential. Factors include: number of manufacturers, value of manufactured goods, firm size, state exports of manufactured goods, export potential, and number of service firms.

The Full Time Equivalent (FTE) domestic field allocation is 304 in FY 1990 and is expected to remain constant in FY 1991. Of that total, Domestic Operations can fund a FY 1990 and 1991 field operations staff complement of 290 FTE.

In light of this recruitment effort, and in light of the need to run the resource allocation model as late in the process as possible, it is premature to speculate about the locations that will be affected in the FY 1991 relocation initiative.

Trade Adjustment Assistance

QUESTION:

The Trade Adjustment Assistance Centers, funded through the International Trade Administration, have provided invaluable assistance to firms injured by import competition. This has aided in retaining jobs for Americans working in the U.S. for those firms and in some instances has strengthened the U.S. firms to the point that they have been able to increase the number of jobs provided to American workers.

a. What is the total amount of new Fiscal Year 1991 funding that would be required to continue the operation of the Trade Adjustment Assistance Centers at the same level as Fiscal Year 1989?

b. For the record, please identify -- by name, location, and amount of Fiscal Year 1989 received and of Fiscal Year 1990 funding has been provided or is expected to be provided to each -- all of the Trade Adjustment Assistance Centers which received trade adjustment assistance center funding in FY 1989 and which have or are expected to receive such funding in FY 1990.

ANSWER:

The Administration budget for fiscal year 1991 does not recommend funding for the continued operations of the Trade Adjustment Assistance Centers (TAACs).

The list below indicates the new budget authority available in each year for each TAAC. Not included are all other available funds.

TAAC NAME LOCATION	FY 1989 FUNDING	FY 1990 FUNDING
New England, Boston, MA	125,000	482,175
New York State, Binghamton, NY	507,772	628,000
New Jersey, Trenton, NJ	307,260	215,000
Mid-Atlantic, Plymouth Meeting, PA	198,122	444,000

TAAC NAME LOCATION	FY 1989 FUNDING	FY 1990 FUNDING
Southeast, Atlanta, GA	296,744	486,400
Great Lakes, Ann Arbor, MI	400,000	185,000
Midwest, Chicago, IL	500,000	368,175
Mid-America, Columbia, MO	115,000	184,000
Southwest, San Antonio, TX	225,000	112,000
Rocky Mountain, Boulder, CO	325,000	394,000
Northwest, Seattle, WA	450,000	235,000
Western, Los Angeles, CA	600,000	584,250

QUESTIONS SUBMITTED BY CONGRESSMAN EARLY

FY 90 Pay Raise and Sequester Costs

QUESTION:

What was the total cost of the FY 90 General Government and SES Pay Raise for the ITA?

-- What was the amount of the Sequester?

ANSWER:

The combined total of the FY 90 General Government and SES Pay Raise for ITA was $2,199,880. In FY 91 the full-year cost will be $2,943,423.

The amount sequestered from ITA in FY 90 was $2,437,000.

FY 1990 Pay Raise and Sequester Costs

QUESTION:

How does ITA plan to absorb these requirements? What impact will this have on the Agency's programs?

ANSWER:

The requirements of the pay raise and sequester will be met by somewhat slowing the speed at which position vacancies are filled, by prudently reviewing all large purchases for potential costs savings and by carefully analyzing our use of outside technical support systems.

We have not experienced any major impacts on our programs from having to meet these requirements.

Trade Adjustment Assistance

QUESTION:

Why is the Department again proposing to eliminate funds for Trade Adjustment Assistance?

a. How much is being allocated for this program in FY 90?

b. What amount would be needed to maintain the same level of efforts in FY 91 as in FY 90?

ANSWER:

The Administration believes that U.S. trade laws provide adequate protection against unfair import competition. Firms harmed by imports should not be entitled to additional special government assistance.

a. The following chart shows funds available for the Trade Adjustment Assistance Program during FY 1990. This chart identifies $13.1 million available for the TAA program.

New FY 1990 Funds Appropriated	$ 4,605,000
Less Gramm-Rudman-Hollings Sequestration	(62,000)
	$ 4,543,000
Available from Unobligated ITA Carryover	$ 737,000
Amounts Available from Prior or Current Year Deobligations Recovered by ITA	774,000
Unexpended Balance Held by TAACs	7,018,000
Total Funds Available	$ 13,072,000

b. The Congress directed that $10,877 million be available for the Trade Adjustment Assistance Program for FY 1990. The amount included carryover and other unexpended amounts available. In order to determine a FY 1991 funding requirement to equate to FY 90 levels, we will need to know the unobligated and unexpended balances available at the end of FY 1990. However, the Administration does not seek continuation of the program.

Antidumping and Countervailing Duties

QUESTION:

The budget request includes an increase of $1.3 million and 18 FTE's for Antidumping/Countervailing Duties Compliance. Why is this increase necessary?

ANSWER:

Consistent with the Department's commitment to ensure that the antidumping and countervailing duty laws are administered in a fair and reasonable manner, ITA has made the timely processing of administrative reviews and elimination of the backlog a major priority. Through the administrative review process, the import of foreign goods is subject to a cash deposit rate that reflects the margin of dumping in more recent periods as opposed to the period covered by the initial investigation. When reviews are not conducted in a timely manner and the backlog expands, foreign exporters have to wait for years to get rate changes. The Department's inability to conduct reviews in a timely manner creates an atmosphere of uncertainty for both domestic and foreign firms and industries. Foreign interests view our inability to administer the laws as unfair and unreasonable. Such views have served to reinforce challenges to the United States' position during Antidumping and Subsidies Code Negotiation in the Uruguay Round.

This increase request is critical to ensuring the timely processing of administrative reviews and eliminating the backlog. The major portion of this increase request is targeted for the completion of antidumping casework. The historical average annual increase in antidumping orders has been about 16 percent. Thus, the workload has constantly expanded. In addition, Congressional amendments to the statutes and administrative and judicial interpretations have increased the procedural and analytical complexity of administering both the antidumping and countervailing laws. As the workload has grown, so too have the collateral responsibilities associated with conducting administrative reviews. For example, scope inquiries and the need for litigation assistance have increased significantly. Compliance has been unable to meet its obligations with its present staff and existing resources.

An extreme example of the amount of stress put on the Compliance organization can be seen in the upcoming reviews of 18 orders covering antifriction bearings from nine countries. Although Import Administration is studying, and will adopt, measures designed to simplify the process, Compliance estimates that those cases will entail a minimum of 16 person years to work over the next 12 months. The present total analytical staff in the Office of Antidumping Compliance is 38.

Import Administration and its constituent offices have taken steps designed to improve the picture. For example, some 60 antidumping administrative reviews have been assigned to other offices. These changes alone cannot correct the situation. The resources requested in this increase are necessary for Compliance to process its caseload in a more timely, accurate and fair manner, consistent with the statute.

Circumvention of Antidumping and Countervailing Duties

QUESTION:

To what extent are there efforts to circumvent antidumping and countervailing duty orders?

ANSWER:

Both the Congress and the Department have been concerned that exporters could escape the discipline imposed by antidumping and countervailing orders through minor alterations to covered products or assembly in third countries and the United States. In 1988, Congress enacted a new Section 781 of the Tariff Act which established procedures for dealing with circumvention.

Since the 1988 amendment, the Department has received six requests to investigate alleged circumvention of antidumping or countervailing orders. In the one inquiry completed to date, the Department found that the antidumping order on Forklift Trucks from Japan was not being circumvented. In a circumvention inquiry requested by a domestic producer on Aluminum Redraw Wire Rod from Venezuela, the Department has preliminarily held that certain wire was within the scope of antidumping and countervailing orders but has reached no specific conclusions regarding circumvention.

A domestic producer of portable electric typewriters alleged in 1989 that Japanese producers were shipping parts to the Republic of Korea (ROK), assembling the typewriters, and then shipping the finished models to the United States in an effort to evade an antidumping order. The Department rejected the original allegation because the relevance of the model in question was before the Courts. Recently the Courts have clarified, somewhat, that relevance, and the allegation is again before the Department.

Two additional allegations on Brass Sheet and Strip from the ROK and the Federal Republic of Germany (FRG) are being considered and disposition is expected soon. A final inquiry has been requested in the case of Electrolic Manganese Dioxide from Japan. That request grew out of a normal scope inquiry, and is being considered now.

ITA FY 1991 Budget Request History

QUESTION:

What was ITA's budget request to the Department and what was the Department's request to OMB?

-- What was disallowed at the Department level? At the OMB level?

ANSWER:

ITA's Secretarial budget request was for $222,752,000 and 2,530 FTE. The Department's request to OMB was for $195,955,000 and 2,452 FTE.

Disallowed at the Department level were proposals for a Cooperator Program, a High Technology Industries Initiative, a Trade Action Group, Increased Intellectual Property Rights Enforcement, a Pacific Rim Initiative, Overseas Cost Containment, Semiconductor Monitoring and Market Analysis, Research on the effects of Foreign Trade Barriers, and Foreign Service Officer Training.

Disallowed at the OMB level were proposals for Canada Free Trade Agreement Promotion, additional CIMS Market Research, IEP Desk Officer Travel, and Office Automation for the US&FCS.

US&FCS FY 1990 Appropriation

QUESTION:

Describe the impact of the FY 90 appropriation on the U.S. and Foreign Commercial Service.

ANSWER:

The increase was directed to Foreign Operations. It allowed us to respond to some of the provisions of the 1988 Trade Act by establishing an initial US&FCS presence at the U. S. Mission to the European Communities in Brussels, at the African Development Bank in Abidjan, and at the Asian Development Bank in Manila.

The increase also generally allowed a modest increase in activities at US&FCS posts throughout the world which was the intention of the request.

Foreign Operations Staffing Increase

QUESTION:

The budget request includes an increase of 107 positions and $7.9 million for the foreign commercial service. Can you give us a country breakdown of how these additional positions will be allocated?

-- What criteria were used in making these determinations?

-- Will any of these positions be assigned to countries where there is currently no FCS presence?

ANSWER:

The country breakdown is listed below. The principal criterion for these determinations is an assessment of (relative) unmet market potential for U.S. exports. In addition, we tried to anticipate economic developments that could create important new opportunities for the 1990's that could benefit from greater US&FCS attention. Several of the positions are in countries or posts that do not currently, as of April 1990, have US&FCS offices. They are:

		POSITIONS	
COUNTRY	CITY	FCSO	FSN
Soviet Union	Leningrad	1	2
Germany, East	Berlin	2	4
Czechoslovakia	Prague	1	3
Bulgaria	Sophia	1	3

The full list of where the positions would be assigned follows.

COUNTRY	CITY(IES)	POSITIONS FCSO	FSN	$K
Japan	Fukuoka, Osaka, Tokyo, Sapporo	6	10	1,840
Belgium	Brussels/USEC	2	4	750
Soviet Union	Leningrad, Moscow*	2	4	740
Germany, East	Berlin	2	4	650
UK	London	2	4	570
Germany, West	Frankfurt, Munich	1	5	460
Mexico	Mexico City	2	4	380
South Asia**	Various	0	6	360
Indonesia	Jakarta, Surabaya	1	5	335
Czechoslovakia	Prague	1	3	330
France	Paris	1	4	280
Singapore	Singapore	1	2	260
Brazil	Brasilia, Sao Paulo	0	5	250
Netherlands	Hague	1	1	250
Korea	Seoul	1	2	240
Bulgaria	Sophia	1	3	220
Hungary	Budapest	1	3	210
Romania	Bucharest	1	3	210
Poland	Warsaw	1	3	190
Italy	Rome, Milan	0	3	165
Sweden	Stockholm	0	2	141
	subtotal	27	80	8,831
	less lapse	-7	-20	-919
		FCSO FTE	FSN FTE	$K
	Total	20	60	7,912

* The FSN'S in Leningrad will be, in fact, nationals of a third country; we employ no Soviet nationals.

** These will be FSN's fluent in English and Japanese who will report on Japanese AID projects.

Foreign Operations

QUESTION:

In how many countries do we now have Foreign Commercial Service representatives?

ANSWER:

The U.S. Government has a full, formal diplomatic presence in 147 countries. American commercial interests are represented by the US&FCS in 65 of the countries and by the Department of State in the remaining 82. However, we expect to establish a US&FCS presence in Czechoslovakia and East Germany at the end of this year and in Bulgaria next year.

Countries Not Covered by FCS

QUESTION:

How many countries are not covered by the FCS? Please provide a list of these countries for the record.

-- Are any of these considered to have a major market potential? If so, why isn't there a FCS presence?

-- Are there any major consulates in FCS countries where there is no FCS officer? If so, would you tell us why?

ANSWER:

Those countries not currently served by the US&FCS, as of April 1990, are:

> Antigua and Barbados Bahamas, Bahrain, Bangladesh, Belize, Benin, Bermuda, Bolivia, Botswana, Brunei, Bulgaria, Burkina Faso, Burma, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cyprus, Czechoslovakia, Dijbouti, El Salvador, Equatorial Guinea, Ethiopia, Fiji, Gabon, Gambia, East Germany, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, Holy See, Iceland, Jordan, Laos, Lebanon, Lesotho, Liberia, Luxembourg, Madagascar, Malawi, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Micronesia, Mongolia, Mozambique, Nepal, Nicaragua, Niger, Oman, Palau, Papua New Guinea, Paraguay, Qatar, Rwanda, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, Sudan, Suriname, Swaziland, Syria, Tanzania, Togo, Tunisia, Uganda, Uruguay, Western Samoa, Yemen, Zaire, Zambia, and Zimbabwe.

The United States does not currently have a full, formal diplomatic presence in Afghanistan, Albania, Cuba, Kampuchea, Namibia, North Korea, and Vietnam. Unofficial commercial and other relations with the people of Taiwan are maintained and funded through a private instrumentality, the American Institute in Taiwan.

With the exception of Taiwan (where we support AIT's request for additional commercial funding), the US&FCS is already responsible for all major U.S. trading partners. We estimate that the State representation in 82 countries covers approximately 10% of the export market for U.S. business. At the requested staffing levels for the US&FCS, the export potential in these 82 countries is insufficient to merit a permanent US&FCS presence.

Economies of scale and finite resources are the principal reason why the US&FCS is not represented at all the consulates handling commercial work in US&FCS countries. However, not all consulates have a sufficient caseload of export-related enquiries to justify a US&FCS presence. In each US&FCS country, we do have a presence in consulates having major economic activity. For example, the consulates in northern Mexico tend to answer import-related questions from U.S. businessmen.

The average cost of posting an American officer assisted by two Foreign Service Nationals at any one post is $400,000 a year.

We find that the State Department Consuls General are taking a closer interest in commercial work, and coordinating trade promotion activities with our commercial officers in that country. The US&FCS is also trying to increase the travel budget of its commercial officers to permit more frequent visits to constituent posts.

Trade and Export Promotion in Non-US&FCS Countries

QUESTION:

How is trade and export promotion handled in these countries where there is no FCS presence?

ANSWER:

The U.S. Government has a full, formal diplomatic presence in 147 countries. American commercial interests are represented by the US&FCS in 65 of the countries and by the Department of State in the remaining 82. In a number of cases, the US&FCS has been able to arrange "partnership post" relationships between individual US&FCS posts and State posts in the region. State Department Economic/Commercial Officers are regularly invited to attend US&FCS regional senior officer conferences and may also attend the mid-level US&FCS training program.

These Department of State Economic/Commercial Officers are the means by which trade and export promotion activities are handled in posts without an FCS presence.

Export Promotion Expenditures

QUESTION:

The justification indicates that the U.S. must act aggressively to catch up with its major competitors in providing encouragement and assistance to exporters. How behind are we?

- What are our competitors doing that we are not?

- What are the most important things we need to do that we are not doing?

ANSWER:

As indicated in another question, we are somewhat limited in obtaining usable data on determining levels of assistance provided by our competitor nations but, we last surveyed some of those nations in 1988 based on 1987 statistics. We found that the United States ranks last in all measures of export promotion among the eight countries surveyed.

Our major competitors use a variety of methods to encourage and assist their exporters. Some nations (West Germany, the United Kingdom and France, for example) assist their firms by subsidizing their participation in trade shows. National tax structures (Canada and possibly others) also assist and encourage exports by providing partial exclusions for business costs related to international business (such as engineering/ feasibility studies and others). Other governments (particularly France and to a degree Japan) assist firms by combining assistance to export banks and aid program discretionary credit rates, which are normally below prime (mixed credits).

Relations with State Department

QUESTION:

How is the FCS's relationship with the State Department, particularly our overseas embassies? Has the situation improved?

-- Are there any problems as a result of rapidly changing events in Eastern Europe and the move toward implementing EC '92 to which ITA is attempting to respond?

ANSWER:

The close working relationship between Secretaries Mosbacher and Baker has set the tone for a better rapport between State and Commerce.

Under Secretary Farren's good relations with Under Secretary of State Selin have likewise led to considerable progress on such issues as State's provision of administrative support and security for US&FCS officers, designation of US&FCS senior commercial officers as Minister-Counselors, and other administrative matters.

US&FCS Director General Schwab and her principal staff in turn have developed good working relations with their State counterparts, with whom they hold regular meetings to discuss a variety of operational issues.

There has been improvement also in the relationship between US&FCS posts and those where State has responsibility for the commercial function. Under the "partnership post" arrangement, US&FCS officers provide informal counsel and assistance to their State colleagues, much to their mutual satisfaction.

The changing events in Eastern Europe and the implementation of EC '92 have not caused any new difficulties in our relations with the Department of State.

Interest, inquiries, and visits by American business and state and local economic development agencies have skyrocketed in both Eastern and Western Europe--in many cases, far beyond our ability to be consistently responsive.

ITA has already established an Eastern Europe Business Information Center in Washington this year and hopes to add staff in Hungary and Poland soon. We also expect to open US&FCS offices in Czechoslovakia and East Germany this year and are contemplating opening in Bulgaria next year. The budget request for 1991 includes requests to increase our publications on Eastern Europe and to provide staff (32 positions) in Eastern Europe and in Western Europe (30 positions).

Competitor Nations

QUESTION:

The justification also states that the U.S. ranks virtually last among major trading nations in all measures of trade promotion activity from overseas staffing to per capita spending. For the record, provide a rank list for the major trading nations and if possible the resources allocated to, and per capita spending for, trade promotion activities, by each.

ANSWER:

We last surveyed competitor nations in 1988 based on 1987 statistics. Competitors were chosen for the survey in large part based on the availability and interpretability of data. The countries chosen were:

> Belgium, Canada, France, Germany, Italy, Sweden, and the UK.

Looking at comparisons of individual foreign countries to the U.S. provided no discernible pattern. However, when we looked at the countries as an aggregate, we saw that these countries, which have an aggregate GNP of 84% of the U.S., devote over 500% as many governmental and quasi-governmental staff years to export promotion as does the U.S. and they also have over 300% as many exports as does the U.S. The table below provides the individual country statistics.

COUNTRY	GNP $B	STAFF YEARS	EXPORTS $B
Belgium	155.7	570	88.6
Canada	369.4	2,555	91.1
France	723.1	2,535	155.9
Germany	915.0	990	294.0
Italy	750.0	1,800	109.0
Sweden	158.3	490	44.0
UK	704.0	2,216	137.0
Total	3,775.5	11,156	919.6
U.S.	4,510.0	2,105	278.0
Foreign totals as a % of U.S.	83.7%	530.0%	330.8%

Another example of these countries' commitments to exports is the per capita expenditure on governmental export promotion: Belgium, $6.35; Canada, $21.44; France, $6.19; Germany, $1.67; Italy, $3.74; Sweden, $8.72; UK, $2.85; and the U.S., $1.20.

Domestic Staffing Relocation/Realignment

QUESTION:

The budget request also includes an increase of $570,000 for US&FCS domestic operations for domestic staffing relocation/realignment. How many offices and positions are involved in this reallocation of resources?

-- The justification indicates that ITA has developed a planning model for use in identifying where resources would be most effectively assigned. What criteria are being used to make these determinations?

-- Have the offices which will be affected been identified? When do you expect to implement these changes?

ANSWER:

These funds are for the one-time expenses necessary to relocate approximately nineteen trade specialists. They will be reassigned where limited resources can be most effectively placed to reach the largest number of small and medium-sized firms with significant export potential.

In addition, promotions, reassignments and attrition through retirement and resignations will determine where relocations will occur.

Our allocation of resources model is based on the desire for an equitable assignment of available field staff to serve the largest number of small and medium-sized firms with significant export potential. Factors include: number of manufacturers, value of manufactured goods, firm size, state exports of manufactured goods, export potential, and number of service firms.

We are in the midst of an aggressive recruitment campaign that will increase the total domestic field complement.

In light of this recruitment effort, and in light of the need to run the resource allocation model as late in the process as possible, it is premature to speculate about the locations that will be affected in the FY 1991 relocation initiative.

Commercial Information Management System

QUESTION:

What was ITA's budget request for the CIMS? What was the Department's recommendation to OMB?

-- What was disallowed from your original request and would you rank the items in terms of priority?

ANSWER:

Two increase requests for CIMS were part of ITA's budget request to the Department. The first was for 4 FTE and $6,264,000 to replace obsolete equipment, fund data conversion/transmission of CIMS data into the National Trade Data Bank (NTDB), and provide 24-hour operation of CIMS. The second increase request was for 0 FTE and $2,000,000 to permit ITA to expand its overseas market research.

The Department's recommendation to OMB reduced the first increase request to 4 FTE and $1,490,000 and the second increase request to 0 FTE and $500,000. The total amount disallowed by the Department was $6,274,000.

OMB eliminated the increase for market research (0 FTE and $500,000) and reduced the increase request for CIMS/NTDB from 4 FTE and $1,490,000 to 0 FTE and $850,000.

ITA considered the CIMS/NTDB increase to be of higher priority than the market research increase.

QUESTIONS SUBMITTED BY CONGRESSMAN DWYER

Foreign Trade Zones

QUESTION:

You are requesting an increase of 4 positions and $160,000 to process an increasing number of Foreign Trade Zone applications.

-- Last year a company in my district waited for months while Customs approved a Foreign Trade Zone application. They also claimed the delay was due to the increased number of applications. Do you believe the success of these Foreign Trade Zones has resulted in this increase?

-- What kind of relationship does ITA have with Customs (Department of Treasury) in processing Foreign Trade Zone applications?

ANSWER:

The Foreign-Trade Zones (FTZ) Board currently receives some 60 applications a year. Most proposals are for changes to existing projects such as expansions and subzones. The increased interest in the use of zones is related to the efforts of companies in the United States to reduce costs to improve their international competitiveness. The additions being made to the FTZ staff will help improve the review process and speed up decisions. The FTZ Board is currently proposing revisions to its regulations that will also improve the process.

The U.S. Customs Service is responsible for reviewing all proposals requiring FTZ Board action. Local Customs officials submit field reports and headquarters reviews the report prepared by ITA's FTZ staff with recommendations for FTZ Board action (Commerce chairs the FTZ Board). Customs makes recommendations to Treasury regarding that Agency's position as a Board member.

Overseas Security

QUESTION:

Page 6 of your justifications indicate that you are requesting $850,000 in FY 91 for overseas security for armored cars, skilled drivers, residential security, and local guard forces -- and that these latter two activities were previously funded by the State Department.

-- Why has the State Department decided it no longer needs to supply you with this security assistance?

-- You also state that: "Unfortunately, security risks are real and that ITA employees should not be expected to face these real dangers without the minimal protections afforded by this increase." What kind of danger and risks have ITA employees been exposed to?

-- And, is this $850,000 adequate to address these concerns?

ANSWER:

It has been our recent experience that it appears the State Department lacks the funds to continue the programs at previous levels. At one time, State's provision and funding for residential security was comprehensive. As budgets shrank, State reduced its level of effort. By FY 1989 funding for these services at any but the critical high-threat posts was eliminated even though Post Security Officers continued to insist the work be done before a residence was occupied.

The current armored vehicle fleet was funded by State on an exceptional basis in FY 1988. State has not funded replacements for these vehicles or any expansion of the fleet. The one-time vehicle procurement by US&FCS in 1988 was accomplished only through the personal intervention of State's Assistant Secretary for Security. Since that time, State has only been willing to fund the armoring, not the procurement of vehicles themselves.

The request also funds the services of drivers skilled in escape and evasion techniques and maintenance and repair costs for armored vehicles. Traditionally, vehicle operational costs have always been the responsibility of the concerned Agency.

The nature of US&FCS outreach programs makes US&FCS officers very visible targets in the local community. The centralization and standardization of local guard services have left individual posts unable to respond to the need for night watchmen and similar security measures. In many Third World countries, a low-tech, low-skilled night watchman or day guard is required to provide the impression of a secured dwelling; residences which do not have watchmen become marked, easy targets. State has also provided local guard service only at critical and high-terrorist threat posts although there is also a strong need at critical and high-crime threat posts. This has left the US&FCS open to criticism from staff who have been robbed, or are known to have been targeted but for whom nothing could be provided under the standards and funding levels which have prevailed.

The $850,000 should be adequate for the personnel level requested in the FY 1991 budget.

Overseas Staffing

QUESTION:

I understand that $7.9 million and 107 additional positions are being requested to beef up your ability to serve clients overseas -- with the emphasis on positions in the Pacific Rim, Eastern Europe, and the Soviet Bloc and the European Community.

-- Would you provide us with a breakdown of exactly which countries, consulates and embassies these positions would go to?

ANSWER:

The staffing breakdown follows:

FY 1991 US&FCS Staffing Increase Request

COUNTRY	CITY(IES)	POSITIONS FCSO	FSN	$K
Japan	Fukuoka, Osaka, Tokyo, Sapporo	6	10	1,840
Belgium	Brussels/USEC	2	4	750
Soviet Union	Leningrad, Moscow*	2	4	740
Germany, East	Berlin	2	4	650
UK	London	2	4	570
Germany, West	Frankfurt, Munich	1	5	460
Mexico	Mexico City	2	4	380
South Asia**	Various	0	6	360
Indonesia	Jakarta, Surabaya	1	5	335
Czechoslovakia	Prague	1	3	330
France	Paris	1	4	280
Singapore	Singapore	1	2	260
Brazil	Brasilia, Sao Paulo	0	5	250
Netherlands	Hague	1	1	250
Korea	Seoul	1	2	240
Bulgaria	Sophia	1	3	220
Hungary	Budapest	1	3	210
Romania	Bucharest	1	3	210
Poland	Warsaw	1	3	190
Italy	Rome, Milan	0	3	165
Sweden	Stockholm	0	2	141
	subtotal	27	80	8,831
	less lapse	-7	-20	-919
		FCSO FTE	FSN FTE	$K
	Total	20	60	7,912

* The FSN'S in Leningrad will be, in fact, nationals of a third country; we employ no Soviet nationals.

** These will be FSN's fluent in English and Japanese who will report on Japanese AID projects.

Overseas Staffing

QUESTION:

Page 5 of your justifications also alludes to the fact that this increase would allow you to maintain a level approaching equivalence to those maintained by competitor nations.

-- How would you compare our U.S. and Foreign Commercial Service staff and representation with those of say the comparable agency in Japan, Germany, or other competitor nations?

ANSWER:

We are unable to fully interpret data available from Japan, but as we indicated in response to a question from Congressman Early, we have done some general research on the competitor nation issue.

We last surveyed competitor nations in 1988 based on 1987 statistics. Competitors were chosen for the survey in large part based on the availability and interpretability of data. The countries chosen were:

Belgium, Canada, France, Germany, Italy, Sweden, and the UK.

Looking at comparisons of individual foreign countries to U.S. provided no discernible pattern. However, when we looked at the countries as an aggregate, we saw that these countries, which have an aggregate GNP of 84% of the U.S., devote over 500% as many governmental and quasi-governmental staff years to export promotion as does the U.S. and they also have over 300% as many exports as does the U.S. The table below provides the individual country statistics.

COUNTRY	GNP $B	STAFF YEARS	EXPORTS $B
Belgium	155.7	570	88.6
Canada	369.4	2,555	91.1
France	723.1	2,535	155.9
Germany	915.0	990	294.0
Italy	750.0	1,800	109.0
Sweden	158.3	490	44.0
UK	704.0	2,216	137.0
Total	3,775.5	11,156	919.6
U.S.	4,510.0	2,105	278.0
Foreign totals as a % of U.S.	83.7%	530.0%	330.8%

Another example of these countries' commitments to exports is the per capita expenditure on governmental export promotion: Belgium, $6.35; Canada, $21.44; France, $6.19; Germany, $1.67; Italy, $3.74; Sweden, $8.72; UK, $2.85; and the U.S., $1.20.

Passage of the Steel Import Stabilization Act

QUESTION:

You are requesting 8 additional positions and $484,000 for your steel program and to fulfill the mandates imposed by the new VRA extension. As you may know, Raritan River Steel, a company in my district, was one company that directly benefited from the short-supply language included in the new Steel Bill. Prior to passage of the Steel Bill, my office worked closely with ITA and the USTR on this issue and in granting several short-supply requests -- and I want to thank you for your assistance throughout this process.

-- Has the ITA noticed any problems with the short-supply provisions since passage?

ANSWER:

The ITA has not experienced any problems in implementing the new provisions of the short-supply program.

On January 12, 1990, interim final regulations governing short-supply procedures were promulgated. The regulations provide explicit guidelines on various aspects of short-supply determinations including: a) information the Department considers in making decisions; b) how to prepare an adequate short-supply petition; c) time limits for making decisions; d) publications of decisions; e) certification of accuracy; f) public vs. proprietary information; and g) the opportunity for interested parties to comment on short-supply determinations.

ITA has received 21 short-supply requests under the new program. All inadequate requests have been returned within 24 hours of receipt, as mandated by the new steel law, with a detailed listing of the inadequacies.

The regulations establish strict 15 and 30-day deadlines for the completion of these reviews. The Department has met the deadlines in each of these reviews. To date, ITA has completed reviews in 14 requests.

All decisions have been published in the Federal Register.

Canada Free Trade Agreement (FTA)

QUESTION:

You are requesting a decrease of $40,000 due to lower than expected costs for Chapter 18 panels under the U.S.-Canada FTA. Yet USTR was in here last week with a $1.5 million increase for the costs of administering the increased dispute settlement procedures for the Department of Commerce under Chapter 19 of the U.S.-Canada/FTA.

-- What is the difference between Chapter 19 and 18 disputes? And, why does USTR pay for Chapter 19 and ITA for Chapter 18 settlements?

ANSWER:

Chapter 19 is a panel review procedure which offers an alternative process to the Court of International Trade in U.S. cases, and provides for a new appeal process in Canadian cases, for review of antidumping (AD) and countervailing duty (CVD) final determinations, administrative reviews, and scope determinations by the U.S. Import Administration and the Canadian International Trade Tribunal; and injury determinations in AD and CVD cases by the U.S. International Trade Commission and the Canadian Deputy Minister of National Revenue for Customs and Excise.

Chapter 18 is a process created to resolve general implementation and compliance disputes under the FTA. Failure to resolve general disputes under the Agreement within certain time periods will permit either Party to request a panel to advise whether a particular measure is consistent with the terms of the FTA Agreement and, if not, make recommendations for resolution of the dispute. The Chapter 18 process is similar to Chapter 19, but with fewer specific deadlines and technical requirements.

Negotiations between the Administration and the Hill during the drafting of the FTA Implementing Legislation resulted in a division of the funding authority.

TUESDAY, MARCH 6, 1990.

BUREAU OF EXPORT ADMINISTRATION

WITNESSES

DENNIS E. KLOSKE, UNDER SECRETARY FOR EXPORT ADMINISTRATION

JOAN M. MC ENTEE, DEPUTY UNDER SECRETARY FOR EXPORT ADMINISTRATION

ROBERT F. KUGELMAN, DIRECTOR OF ADMINISTRATION

VICTOR MICIT, DIRECTOR, OFFICE OF BUDGET AND FINANCIAL MANAGEMENT

ALAN P. BALUTIS, DIRECTOR FOR BUDGET, PLANNING AND ORGANIZATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next we shall consider the FY 1991 budget request for the Bureau of Export Administration. The request is for $44,373,000. This amount is an increase of $2,957,000 above the appropriation for FY 1990.

We will insert the justification materials submitted in support of this request into the record at this point.

[The justifications follow:]

DEPARTMENT OF COMMERCE
BUREAU OF EXPORT ADMINISTRATION
Budget Estimates, Fiscal Year 1991
Congressional Submission

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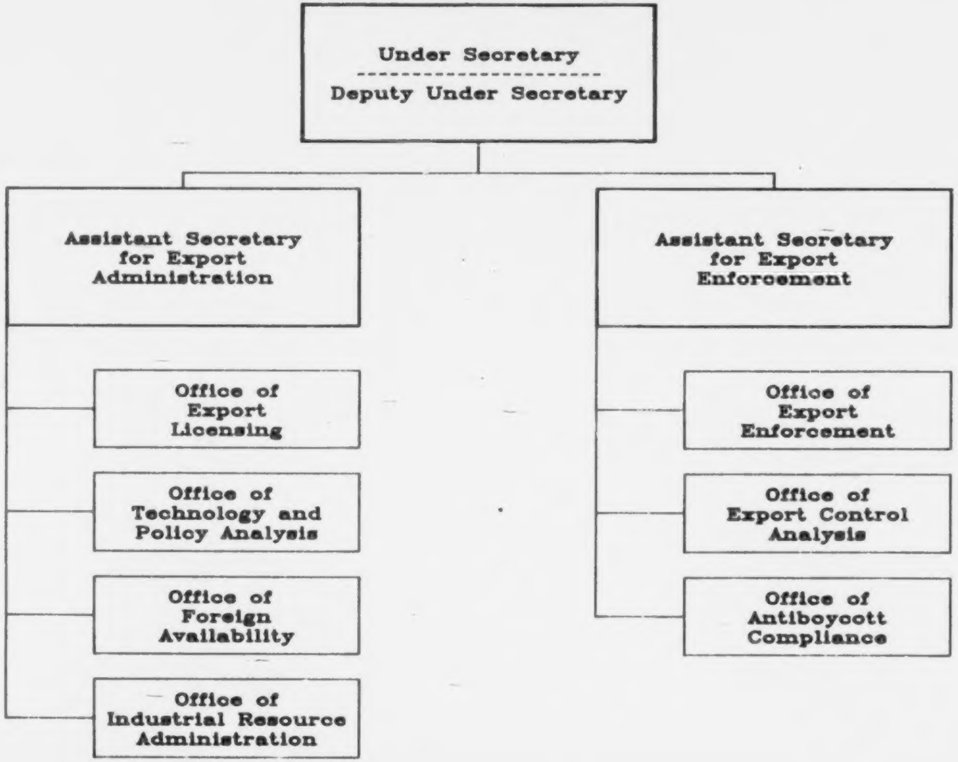
DEPARTMENT OF COMMERCE
Bureau of Export Administration


Under Secretary
Deputy Under Secretary
Assistant Secretary for Export Administration
Office of Export Licensing
Office of Technology and Policy Analysis
Office of Foreign Availability
Office of Industrial Resource Administration
Assistant Secretary for Export Enforcement
Office of Export Enforcement
Office of Export Control Analysis
Office of Antiboycott Compliance

BXA-1

General Statement

The primary mission of the Bureau of Export Administration (BXA) is to enforce U.S. export trade law and regulations relating to national security, foreign policy, and short supply requirements. Created by and drawing its authority from the Export Administration Act of 1979, as amended (EAA), the program strives to achieve an appropriate balance between economic and national security interests. The mission is carried out within the Office of the Under Secretary for Export Administration and two primary operating units: Export Administration (EA) and Export Enforcement (EE).

The Management and Policy Coordination function within the office of the Under Secretary develops, analyzes, and coordinates policies relating to BXA's mandate. Through the offices of the Under Secretary and Deputy Under Secretary for Export Administration, BXA develops, monitors and coordinates the preparation of various mission related studies, reports, and congressional testimony; directs, coordinates and monitors participation in interagency staff activity; and represents the Department of Commerce and U.S. Government in both national and international fora. Public Affairs and Congressional Liaison activities are also included in the Management and Policy Coordination function.

Export Administration has direct responsibility for: (1) operating the export licensing system whereby goods and technical data controlled for reasons of national security, foreign policy, or short supply are approved or denied license for export in international commerce; (2) analyzing and developing policies relating to the technical parameters of goods and technology subject to control, drafting regulations relating to the same, and representing BXA in numerous interagency and international fora on such controls; and (3) analyzing the foreign availability of controlled goods or technology for the purpose of assessing the need for continuation of controls.

Export Enforcement performs a police and intelligence function with respect to export controls, seeking through outreach programs and investigations to prevent and/or detect and bring to justice the illegal and unauthorized export of controlled U.S. goods or technology. Program responsibilities also include enforcement of the EAA and related regulations prohibiting U.S. corporate or individual participation in unsanctioned boycotts against countries friendly to the U.S.

Industrial Resource Administration, which reports to the Assistant Secretary for Export Administration, manages the overall national security preparedness programs of the Department of Commerce. Under the authority of the Defense Production Act (DPA) of 1950, as amended, it identifies bottlenecks to industrial production which would be critical in the event of a national security crisis; administers the Priorities and Allocations System; participates in the management of the National Defense Stockpile; and coordinates international preparedness efforts with our NATO allies. The Industrial Resource Administration is also responsible for the performance of Section 232 investigations, the analysis of defense MOUs and the analysis of proposed foreign investments in defense-related industries.

(Dollar amounts in thousands)

	Appropriation Currently Available		1991 Estimate		Inc.(+) or Dec.(-)		Perm Emp. 12/31
	Pos.	Amount	Pos.	Amount	Pos.	Amount	
Operations and administration	565	$41,416	594	$44,373	29	$2,957	475

The request for the "Operations and administration" appropriation in 1991 is $44,373,000, an increase of $2,373,000 over 1990. This increase is composed of the following:

a)	Adjustments to base and built-in changes which include: Adjustments for FY 1990 and FY 1991 pay increases and related costs: $1,010,000; Other increases $1,298,000; Other decreases -$1,426,000	-1	$882,000
b)	Changes in the following programs: Export Administration: Exporter Assistance Activities (10 positions and $410,000) and Technology and Policy Analysis (9 positions and $888,000); Industrial Resource Administration (11 positions and $835,000). Decreases: Management and Policy Coordination (-$642,000)	30	$1,491,000

Highlights of 1991 Changes

For Export Administration, Exporter Assistance Activities we are requesting 10 positions and $410,000 to enable BXA to maintain staff in Boston Massachusetts, Portland Oregon, and San Jose California.

For Export Administration, Technology and Policy Analysis Enhancements we are requesting 9 positions and $888,000 to meet the additional responsibilities related to the Commodity Control List, COCOM review and decontrol issues, and to more frequently update export control bulletins.

For Industrial Resource Administration we are requesting 11 positions and $835,000 to enable BXA to meet its expanded responsibilities as required by provisions of the Omnibus Trade Act of 1988, the Defense Authorization Act of 1989, and the amendments to the Defense Production Act of 1950. These responsibilities relate to the review of offsets in defense trade, defense Memoranda of Understanding (MOU) and direct foreign investments in defense-related industries.

For Management and Policy Coordination we are proposing a decrease of $642,000 as a partial offset to program increases.

Department of Commerce
Bureau of Export Administration
Operations and Administration

SUMMARY OF RESOURCE REQUIREMENTS

(Dollar amounts in thousands)

Page No.			Personnel	Amount	Personnel	Amount
	Appropriation enacted, 1990	Pos./BA			-	42,000
	Sequester Applied, 1990	Pos./BA				(584)
	Summary of adjustments to base:					
	Appropriation currently available, 1990	Pos./BA	0	0	565	41,416
		FTE/Obl.	0	0	555	43,626
BXA-7	FY 1991 Adjustments to base:					
	Transfers	Pos./BA	0	0		
		FTE/Obl.	0	0		
	Adjustment for 1990, 1991, and SES pay increase and related costs	Pos./BA	0	1,219		
		FTE/Obl.	0	0		
	Other cost changes	Pos./BA	(1)	247		
		FTE/Obl.	(4)	0		
	Subtotal Adjustments to Base	Pos./BA			(1)	1,466
		FTE/Obl.			(4)	0
	1991 Base	Pos./BA			564	42,882
		FTE/Obl.			551	0

			1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/(Decrease) from 1991 Base	
	Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
BXA-18	Management and Policy Coordination	Pos./BA.	28	$2,479	32	$2,547	32	$2,635	32	$1,993	0	($642)
		FTE/Obl.	17	2,371	31	2,511	31		31		0	
BXA-22	Export Administration	Pos./BA.	252	21,608	304	21.976	303	23,100	322	24,398	19	1,298
		FTE/Obl.	272	20,959	298	23,473	294		310		16	
BXA-36	Export Enforcement	Pos./BA.	171	14,378	201	15,029	201	15,259	201	15,259	0	0
		FTE/Obl.	180	15,330	199	15,688	199		199			
BXA-41	Industrial Resource Administration	Pos./BA.	24	1,641	28	1,864	28	1,888	39	2,723	11	835
		FTE/Obl.	23	2,057	27	1,954	27		36		9	
	Total	Pos./BA.	475	$40,106	565	$41,416	564	$42,882	594	$44,373	30	$1,491
		FTE/Obl.	492	$40,717	555	$43,626	551		576		25	

Department of Commerce
Bureau of Export Administration
Operations and Administration

SUMMARY OF REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/(Decrease) from 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Management and Policy Coordination	Pos./BA.	0	$0	0	$0	0	$0	0	$0	0	$0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Export Administration	Pos./BA.	4	310	4	800	4	350	4	350	0	0
	FTE/Obl.	4	351	4	800	4	350	4	350	0	0
Export Enforcement	Pos./BA.	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Industrial Resource Administration	Pos./BA.	0	0	0	0	0	0	0	0	0	0
	FTE/Obl.	0	0	0	0	0	0	0	0	0	0
Total	Pos./BA.	4	$310	4	$800	4	$350	4	$350	0	$0
	FTE/Obl.	4	$351	4	$800	4	$350	4	$350	0	$0

Bureau of Export Administration
Operations and Administration
SUMMARY OF FINANCING
(Dollar amounts in thousands)

	1989 Actual	1990 Currently Available	1991 Base	1991 Estimate	Increase/ (Decrease) Over 1991 Base
	Amount	Amount	Amount	Amount	Amount
Total Obligations	$41,068	$44,426	$43,232	$44,723	$1,491
Financing:					
Offsetting collections from:					
Federal funds	0	0	0	0	0
Trust funds	(351)	(800)	(350)	(350)	0
Non-Federal sources	0	0	0	0	0
Recovery of prior year obligations	(273)	0	0	0	0
Unobligated balance:					
Start of year	(2,548)	(2,210)	0	0	0
End of year	2,210	0	0	0	0
Budget Authority	40,106	41,416	42,882	44,373	1,491
Sequester	0	584	0	0	0
Appropriation	$40,106	$42,000	$42,882	$44,373	$1,491

Adjustments to Base and Built-in Changes
(Direct obligations in thousands)

	Perm. Pos.	Amount
Transfer of 2 FTE to Department's Working Capital Fund.	0	0
GRH Reductions	(16)	($717)
Adjustment for Foreign Availability program change	15	765
FY 1990 pay increase	0	820
FY 1991 pay increase	0	341
Subtotal	**(1)**	**1,209**
Other Changes:		
Full-year cost in 1991 of positions financed for part year in 1990	0	100
Overseas Wage Increases	0	2
Civil Service Retirement System (CSRS)	0	(31)
Federal Employees' Retirement System (FERS) basic benefit	0	68
Thrift Savings Plan	0	9
Federal Insurance Contributions Act (FICA)	0	33
Medicare	0	3
Federal Telecommunications System (FTS-2000)	0	(93)
Other services (Working Capital Fund)	0	58
Regional Administrative Support Centers (RASC)	0	36
Supplies and materials	0	17
Overseas Price Increases	0	55
Subtotal, other changes	**0**	**257**
Total Adjustments to Base and Built-in Changes	**(1)**	**$1,466**

Operations and Administration

JUSTIFICATION OF ADJUSTMENTS TO BASE AND BUILT-IN CHANGES

(Direct obligations in thousands)

			Perm Pos.	Amount
Transfer			0	0
This adjustment represents a transfer of 2 FTE to the Department's Working Capital Fund to support the office of Personnel and Civil Rights.				
The effect in 1991 of the 1990 sequester.			(16)	($717)
Adjustment for Phase II of the Foreign Availability Program Change			15	765
This adjustment is part of a two part program change which was approved in FY 1990 and which will enable the Foreign Availability Program to address new mandates that are of substantial interest to the exporting community.				
Adjustment for 1990 pay increase and related costs			0	820
Effective January 1, 1990, Federal employees received a 3.6 percent pay increase. In 1990, BXA is absorbing the full cost of this pay raise.				
Total cost in 1990 of pay increase	611,373			
Less amount absorbed	(611,373)			
Anticipated 1990 pay increase supplemental	0			
Amount in 1991 to provide full-year cost of pay increase	820,045			
Less amount absorbed	0			
Subtotal, adjustment for 1990 pay increase		820,045		
Adjustment for 1991 pay increases and related costs			0	341
The President's Budget includes an estimated general pay raise of 3.5% effective January 1, 1991. One-half of the 1991 costs of that increase will be absorbed. The estimate also includes an average SES increase of 22%, with 50% of the cost absorbed.				
Total cost in 1991 of general pay increase	547,000			
Less amount absorbed	(274,000)			
Subtotal, adjustment for 1991 general pay increase		273,000		
Total cost in 1991 of SES pay increase	136,000			
Less amount absorbed	(68,000)			
Subtotal, adjustment for 1991 SES increase		68,000		
Total adjustment for 1991 pay increases		341,000		

			Perm Pos.	Amount
Full-year cost in 1991 of positions financed for part year in 1990			0	$100
Annual Salary of new positions in 1990 budget	415,003			
Less 5% lapse	(20,750)			
Full-year cost of personnel compensation		394,253		
Personnel Benefits:				
FERS (.1300)	51,253			
Thrift Savings Plan (.02)	7,885			
OASDI--FERS related (.9483 x .0620)	23,180			
Medicare (.9483 x .0145)	5,421			
Health Insurance (.048)	18,924			
Life Insurance (.002)	789			
Total		107,452		
Full-year cost of personnel compensation and benefits		501,705		
Less personnel compensation and benefits included in the 1990 budget		(401,848)		
1991 adjustment-to-base		99,857		
Overseas Wage Increases			0	2

The FSN salary increase is for wage adjustments in 9 countries based on calculations utilizing econometric forecasting methodology. The FY 1990 costs of FSN wages, including benefits, for each country is determined. Econometric forecasting is then utilized to determine two components by country: (a) the percentage of change in wages and (b) the forecasting of 1990 and 1991 exchange rates. This data is then converted into an anticipated percentage increase factor for wages. In cases where data is unavailable, historical information is utilized to obtain a percentage factor. Once percentage factors are choosen for each country, the total is utilized as the anticipated ATB.

			Perm Pos.	Amount
Civil Service Retirement System (CSRS)			0	(31)

The number of employees covered by Civil Service Retirement System (CSRS) continues to drop as positions become vacant and are filled by employees who are covered by the Federal Employee's Retirement System.

Regular Employees:		
Salaries Subject to Retirement for 1990	17,435,250	
CSRS Cost in 1990 ($17,435,250 X .667 X .07)	814,052	
CSRS Cost in 1991 ($17,435,250 X .642 X .07)	783,540	
Decrease in CSRS costs		(30,512)

			Form Pos.	Amount
Civil Service Retirement System (CSRS) - continued				
Foreign Service Employees:				
Salaries Subject to Retirement for 1990	325,750			
CSRS Cost in 1990 ($325,750 X .667 X .075)	16,296			
CSRS Cost in 1991 ($325,750 X .642 X .075)	15,685			
Decrease in CSRS costs		(611)		
Total decrease in CSRS costs		(31,122)		
Federal Employees' Retirement System (FERS)			0	$68
The number of employees covered by FERS continues to rise as employees covered by CSRS leave the Government and are replaced with employees covered by FERS.				
Regular Employees:				
FERS cost in 1990 ($14,695,250 x .333 x .1297)	634,689			
FERS cost in 1991 ($14,695,250 x .358 x .1300)	683,917			
Increase for Regular Employees		49,228		
Law Enforcement Agents:				
FERS cost in 1990 ($2,740,000 x .3330 x .2540)	231,755			
FERS cost in 1991 ($2,740,000 x .3580 x .2540)	249,154			
Increase for Law Enforcement Agents		17,399		
Foreign Service Employees:				
FERS cost in 1990 ($325,750 x .3330 x .2186)	23,713			
FERS cost in 1991 ($325,750 x .3580 x .2186)	25,493			
Increase for Foreign Service employees		1,780		
Total Increase for FERS basic benefits		68,407		
Thrift Savings Plan			0	9
The cost of agency contributions will rise as FERS participation increased.				
Cost in 1990 ($17,761,000 x .3330 x .02)	118,288			
Cost in 1991 ($17,761,000 x .3580 x .02)	127,169			
Total increase in Thrift Plan cost		8,881		

				Perm Pos.	Amount
Federal Insurance Contributions Act (FICA)				0	$33
Employees covered by CSRS are not covered by Old Age, Survivors, and Disability Insurance (OASDI). As the percentage of payroll coverage by FERS increases, the cost of OASDI contributions will increase.					
Regular Employees:					
Payroll subject to FICA tax in 1990 ($14,695,250 x .333 x .9358)	4,579,354				
OASDI Tax in 1990 (4,579,354 x .0617)		282,546			
Payroll subject to FICA tax in 1991 ($14,695,250 x .3580 x .9483)	4,988,911				
OASDI Tax in 1991 (4,988,911 x .0620)		309,312			
Increase (1991 -1990)			26,766		
Foreign Service:					
Payroll subj. to FICA tax in 1990 ($325,750 x .333 x 1.00)	108,475				
OASDI Tax in 1990 ($108,475 x .0617)		6,693			
FERS Payroll Subject to FICA Tax in 1991 ($325,750 x .358 x 1.00)	116,619				
FERS OASDI Tax in 1991 ($116,619 x .0620)		7,230			
Increase (1991 -1990)			537		
Law Enforcement Agents:					
Payroll subject to FICA tax in 1990 ($2,740,000 x .333 x .9842)	898,004				
FERS OASDI Tax in 1990 ($898,004 x .0617)		55,407			
Payroll subject to FICA tax in 1991 ($2,740,000 x .358 x .9903)	971,405				
FERS OASDI Tax in 1991 ($971,405 x .0620)		60,227			
Increase (1991 -1990)			4,820		
Other than Permanents:					
Payroll Subject to FICA Tax in 1990 ($780,000 x .9358)	729,924				
OASDI Tax in 1990 (729,924 x .0617)		45,036			
OTP Payroll Subject to FICA Tax in 1991 ($780,000 x .9483)	739,674				
OASDI Tax in 1991 (739,674 x .0620)		45,860			
Increase (1991 -1990)			824		
Total OASDI Increase			32,947		
Medicare				0	3
All employees are subject to Medicare contributions. The rate will remain the same (1.45%) but the percentage of payroll subject to FICA will increase in 1991.					

Medicare - continued

	FTP	OTP	TOTAL
Total payroll for regular employees	$14,695,250	$780,000	$15,475,250
Subject to FICA in 1990 (x.9358)	13,751,815	729,924	14,481,739
Subject to FICA in 1991 (x.9483)	13,935,506	739,674	14,675,180
Increase in Payroll Subject to FICA (1991-1990)	$183,691	$9,750	$193,441
Increase in Medicare tax ($193,441 x .0145)			$2,805
Total payroll for Law Enforcement Agents		$2,740,000	
Subject to FICA in 1990 ($2,740,000 x .9842 x.0145)		39,101	
Subject to FICA in 1991 ($2,740,000 x .9903 x.0145)		39,345	
Increase in Payroll Subject to FICA (1991-1990)			$243
Total payroll for Foreign Service		$325,750	
Subject to FICA in 1990 ($325,750 x 1.00 x.0145)		4,723	
Subject to FICA in 1991 ($325,750 x 1.00 x.0145)		4,723	
Increase in Payroll Subject to FICA (1991-1990)			$0
Total Increase in Medicare Tax			$3,048

	Perm Pos.	Amount
Federal Telecommunications System (FTS-2000)	0	($93)
Following implementation of FTS-2000, GSA anticipates lower rate charges for telephone services. A $93,000 decrease is requested.		
Working Capital Fund	0	58
An increase of $58,000 is requested for cost increases related to the Departmental Working Capital Fund in order to maintain current levels of operation. This represents an increase of .97% over the 1990 Budget: $6,005,000 ($6,005,000 x .0097).		
Regional Administrative Support Centers (RASC)	0	36
BXA's cost for services relating to the Administrative Support Centers are projected to exceed the amount paid in 1988. Because this increase was not known by BXA in time for the 1989 and 1990 budgets, the base for those years was not adjusted. A 1991 adjustment of $35,700 represents the difference between the 1988 actual of $42,900 and the estimated 1989 cost of $78,600 ($78,600 - $42,900).		
Overseas Price Increases	0	55
The same methodology is applied to the determination of Overseas Price Increases as was outlined for the Foreign Service Nationals Wage Increases.		
Supplies Materials	0	17
On February 1, 1988, GSA added a surcharge for goods supplied through the FSS stock and other special order programs. An increase of $17,000 ($491,000 X 3.46%) is requested to off-set this increase. This adjustment represents 3.46% of BXA's 1990 budget.		
Total, Adjustment to Base and Built-in-Changes	(1)	$1,466

Appropriation Language and Code Citations:

1. "For necessary expenses for export administration and national security activities of the Department of Commerce,"

15 U.S.C. 1501 et seq.
50 U.S.C. app. 2401 et seq.
Act of December 22, 1987, P. L. 100-202, Section 101(a), Title I, Section 108

1501 U.S.C. 1501 et seq. provides the basic authority for performance of those functions and activities of BXA which promote an improved trade posture for United States Industry.

50 U.S.C. app. 2401 et seq. provides authority for the regulation of exports for reasons of national security, foreign policy, or short supply problems. It also authorizes implementation of restrictions on compliance with foreign boycotts and other restrictive trade practices.

The Act of December 22, 1987, Public Law 100-202, Section 101(a), Title I, Section 108, authorizes the Secretary of Commerce to establish a Buying Power Maintenance account for the Bureau of Export Administration. This fund is to be used to maintain overseas program activity at the appropriated program levels.

19 U.S.C. 1862 requires the investigation upon request, of the effects on national security of imports of a particular article, and a report of the results of the investigations to the President with a recommendation for action or inaction.

42 U.S.C. 300j authorizes the issuance of orders requiring the delivery of chemicals or substances necessary for treatment of water.

50 U.S.C. 98-98h authorizes the acquisition and retention of stocks of certain strategic and critical materials.

National Security Act of 1947, as amended, provides for the development of national emergency plans and preparedness programs.

50 U.S.C. app. 2061 et seq. authorizes BXA to set priorities for performance on defense and energy-related contracts and to allocate materials and supplies which are essential for national defense purposes and for maximization of domestic energy supplies.

2. "including costs associated with the performance of export administration field activities both domestically and abroad;"

22 U.S.C. 3901 et seq.
22 U.S.C. 2651 et seq.

22 U.S.C. 3901 et seq., the Foreign Service Act of 1980, consolidated and revised the laws relating to the administration and operations of the Foreign Service of the United States. This appropriation language authorizes the Secretary to establish and administer a separate Export Administration field organization and utilize, therefore, the authorities of the Foreign Service Act.

22 U.S.C. 2651 et seq. establishes the Department of State and provides authority for a number of overseas operations. This appropriation language authorizes the utilization of certain of these authorities in connection with the operation of a separate Export Administration field organization.

3. "full medical coverage for dependent members of immediate families of employees stationed overseas;"

No Specific Authority

This language permits Export Administration to extend to certain of its overseas employees the same benefits afforded domestically employed Federal employees and employees of ITA's Foreign Commercial Service in equivalent positions overseas.

4. "employment of Americans and aliens by contract for services abroad;"

No Specific Authority

44 CG 761, OPM guidance, and House Report 89-188 have concluded that Federal agencies must have specific authority to employ personnel by contract. In order to handle the full range of Export Administration services abroad, EA may require the use of personnel who speak the language of the host country; are familiar with local practices and procedures; or who only need to be employed for a short period of time. In some cases, however, it is more advantageous to employ U.S. citizens in the host country (generally members of an employee's family) because they have greater familiarity with American methods and, therefore, require less effort to train.

5. "rental of space abroad for periods not exceeding ten years, and expenses of alteration, repair, or improvement;"

No Specific Authority

40 U.S.C. 278a prohibits expenditures for building rental if the rent is more than 15 percent over the fair market value of the premises and prohibits expenses for alterations, improvements, and repairs of rented premises which exceed 25 percent of the rent.

Rental terms are established overseas and may or may not exceed the percentage provisions of 40 U.S.C. 278a. Without this waiver, EA may be unduly hampered in its efforts to meet necessary space needs overseas. To limit expenditures for alterations and improvements would seriously restrict the quality, effectiveness, and security of the premises occupied by Export Administration.

6. "payment of tort claims, in the manner authorized in the first paragraph of 28 U.S.C. 2672 when such claims arise in foreign countries;"

No Specific Authority

28 U.S.C. 2672 provides for settlement of tort claims for money damages of $2,500 or less against the United States by the head of each federal agency for loss of property or personal injury or death caused by a negligent or wrongful act of any employee of the Government while acting within the scope of his employment in circumstances where the United States, if a private person, would be liable under local law. However, U.S.C. 2680 (k) exempts the settlement of tort claims which arise abroad from the provisions of 28 U.S.C. 2672. The language requested would exempt EA from 22 U.S.C. 2680 and would cover the settlement of tort claims against the United States which arise in connection with EA activities abroad.

7. "not to exceed $25,000 for official representation expenses abroad;"

No Specific Authority

5 U.S.C. 5536 prohibits additional pay, extra allowances, or compensation unless the appropriation explicitly states that it is for such additional pay, extra allowances or compensation.

8. "awards of compensation to informers under the Export Administration Act of 1979, and authorized by 22 U.S.C. 401(b);"

22 U.S.C. 401(b)
50 U.S.C. app. 2411

22 U.S.C. 401 (b) provides for awards of compensation to informers concerning illegal exports of war materials or other articles in violation of the law, when funds are specifically provided therefor.

50 U.S.C. app. 2411 provides EA with authority to make investigations and obtain such information as may be necessary to enforce the provisions of the Export Administration Act of 1979.

9. "purchase of passenger motor vehicles for official use and motor vehicles for law enforcement use with special requirement vehicles eligible for purchase without regard to any price limitation otherwise established by law;"

No Specific Authority

31 U.S.C. 1343(a) prohibits the purchase of passenger motor vehicles unless specifically authorized by the appropriation concerned or other law with the exception of those for the use of the President of the United States, the secretaries to the President, or the heads of the executive departments.

10. "...to remain available until expended;"

No Specific Authority

31 U.S.C. 1301 provides that appropriations are for the service of the current year "unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provision."

11. "provided that the provisions of the first sentence of section 105(f) and all of section 108(c) of the Mutual Educational and Cultural Exchange Act of 1961 (22 U.S.C. 2455(f) and 2458(c)) shall apply in carrying out these activities."

No Specific Authority

22 U.S.C. 2455(f) provides authority to accept contributions of funds, property, and services from foreign government, international organizations, and private individuals, firms, associations, agencies, and other groups in carrying out activities pursuant to the Mutual Educational and Cultural Exchange Act of 1961.

22 U.S.C. 2458(c) provides authorization for all necessary expenditures involved in the selection, purchase, rental, construction, or other acquisition of exhibitions and the necessary supplies therefor.

This phrase provides for extension of this authority and permits BXA to collect funds for use in conducting export administration activities.

Justification of Proposed Language Changes

1. Before the words "for official representation expenses aborad; "delete the amount $5,000" and insert the amount "$25,000.

   This change is necessary because of increased overseas costs and the placement of additional BXA personnel overseas by 1991.

2. After the words "to remain available until expended;" delete the words "of which $1,000,000, including $775,000 previously appropriated, shall be available for additional regional export control assistance offices to be located in the Northern California area, in Portland, Oregon, and the Boston/Nashua area."

   These three offices will be operational by 1991 and will be funded by direct appropriation, not previously appropriated amounts. In addition, the final amount needed to maintain these offices should be consistent with program needs and not be legislatively mandated.

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Management and Policy Coordination	Pos./BA	28	$2,479	32	$2,547	32	$2,635	32	$1,993	0	($642)
	FTE/Obl.	17	2,371	31	2,511	31		31		0	

JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Management and Policy Coordination

Goals and Objectives

Goal: The goal of this activity is to safeguard the national interest through effective administration of U.S. export control laws.

Objectives: Pursuant to the Export Administration Act of 1979, as amended, (the Act), the objectives of this activity are to develop, implement and enforce export controls for reasons of national security, foreign policy and short supply; expedite decontrol of non-critical commodities; take prompt, aggressive action against violations of U.S. export control statutes; harmonize export control programs with our allies; oppose restrictive trade practices or boycotts; and develop/implement sound policies relating to the U.S. defense industrial base.

Base Program

This activity includes the Office of the Under Secretary for Export Administration and the Office of the Deputy Under Secretary for Export Administration, which provide management and policy guidance to the Assistant Secretaries responsible for the operation of statutory export control, export enforcement and defense industrial base programs. Also included in this activity are Congressional Affairs and Public Affairs activities.

Ongoing responsibilities of this activity include: (1) Providing management and policy guidance; (2) performing oversight responsibilities; (3) establishing the Bureau of Export Administration's (BXA's) overall policy agenda; (4) setting management objectives to be pursued by the operating units and evaluating the performance of these units; (5) providing policy support to the Secretary of Commerce on matters relating to BXA's statutory responsibilities; (6) carrying out a selected number of high-level policy and program initiatives each year which generally involve other governments, other executive agencies, and the intelligence community; (7) preparing reports, Congressional testimony, etc. relating to BXA activities; (8) representing the Department in ongoing dialogues with other agencies such as the Defense Department, the U.S. Customs Service, the State Department, and the U.S. Trade Representative on export control issues; (9) providing leadership to international negotiations at COCOM; and (10) handling appeals of licensing and enforcement decisions as part of an extended legal process involving Departmental Administrative Law Judges and the Office of the General Counsel.

Decrease for FY 1991
(Direct obligations in thousands)

		FY 1991 Base		FY 1991 Est.		Incr.(+)/Dec.(-)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Management and Policy Coordination	Pos./BA	32	$2,635	32	$1,993	0	-$642
	FTE/Obl.	31		31		0	

Offset to Program Changes: (-$642,000) - This decrease is being proposed as a partial offset to program increases and reflects the Department's commitment to keep Federal spending at the lowest possible levels.

As a result of a review of base program expenditures, the Department has identified resources that could be reduced to offset proposed program increases. If the full increases are not approved by Congress, BXA would propose to reprogram the proposed offset amount to fund disallowed portions of the increase requests. Although shown under the Management and Policy Coordination activity, this decrease will be spread to all BXA programs with 1991 budget increases.

PROGRAM CHANGE DETAIL BY OBJECT CLASS

(Dollars in thousands)

Activity: Management and Policy Coordination
Subactivity: Management and Policy Coordination
Program Change: Offset to Program Changes

Object Class	FY 1991 Increase
11 Personnel compensation	
11.1 Full-time permanent	$0
11.3 Other than full-time permanent	0
11.5 Other personnel compensation	0
11.8 Special personnel services payments	0
11.9 Total personnel compensation	0
12.1 Civilian personnel Benefits	0
13 Benefits for former personnel	0
21 Travel and transportation of persons	0
22 Transportation of things	0
23.1 Rental payments to GSA	0
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	0
24 Printing and reproduction	0
25 Other services	(642)
26 Supplies and materials	0
31 Equipment	0
32 Lands and structures	0
33 Investments and loans	0
41 Grants, subsidies and contributions	0
42 Insurance claims and indemnities	0
43 Interest and dividends	0
44 Refunds	0
99 Direct obligations	($642)

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Export Administration........	Pos./BA	252	$21,608	304	$21,976	303	$23,100	322	$24,398	19	$1,298
	FTE/Obl.	272	20,959	298	23,473	294		310		16	

PROGRAM AND PERFORMANCE: REIMBURSABLE OBLIGATIONS

(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Export Administration........	Pos./BA	4	$310	4	$800	4	$350	4	$350	0	$0
	FTE/Obl.	4	351	4		4		4		0	

JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Export Administration

Goals and Objectives

Goal: The goal of this activity is to safeguard the national interest through effective administration of U.S. export control laws.

Objectives: Pursuant to the Export Administration Act of 1979, as amended, (the Act), the objectives of this activity are to develop and implement export controls for reasons of national security, foreign policy and short supply; expedite decontrol of non-critical commodities; harmonize export control programs among our allies; and continue to improve license application processing.

Base Program

The Export Administration (EA) activity exercises licensing jurisdiction over the export of dual-use commodities and technical data from the United States and the re-export of these commodities and technical data from other foreign destinations under the Export Administration Act of 1979, as amended (the Act). Exports of commodities or technical data for which there are strategic or foreign policy concerns require formal authorization through issuance of an export license. EA controls the export of all commodities and technical data within its jurisdictions by means of general, validated, and special licenses.

The major activities undertaken by EA include: (1) interpreting and applying policies and procedures in the review and analysis of export license applications; (2) documenting (for interagency consideration) proposed export transactions posing significant technical and/or policy problems; (3) conducting technical and foreign availability analyses of products to determine and recommend the extent of controls to be applied; (4) referring license applications to the Office of Export Enforcement (OEE) for enforcement review; (5) processing emergency applications; (6) preparing reports on export control activities that are submitted to the President and the Congress; (7) developing and publishing export control regulations and procedures; (8) maintaining a public contact office and rendering support for formal Government/Industry Technical Advisory Committees chartered under the Act; (9) issuing export licensing guidance for BXA's Office of Export Enforcement (OEE), Customs Service agents, and U.S. and Foreign Commercial Service Officers; (10) providing technical and policy support for bilateral and multilateral export control negotiations; (11) providing assistance to the business community through it's Exporter Assistance Staff and Western Regional Office (WRO) in meeting statutory and regulatory requirements; and (12) performing commodity classification reviews to determine which items are subject to export control. Export Administration is comprised of three program areas: (1) Export Licensing; (2) Technology and Policy Analysis; and (3) Foreign Availability.

Export Licensing: Export Licensing (EL) is the focal point in BXA for the analysis, interpretation and decision making regarding all export and re-export licensing transactions involving technology, equipment, commodities and technical data that are controlled for national security, foreign policy and short supply considerations. Dual-use commodities (i.e. those with both civil and military applications) require formal authorization from EL prior to shipment. EL authorizes individual export and re-export transactions to specific foreign consignees via individual validated licenses (about $101 billion in 1988) as well as multiple transactions to numerous pre-approved consignees under special licensing programs (over $29 billion in 1988 for the Distribution Licenses alone). EL consults with the Departments of State,

Energy and the Nuclear Regulatory Commission regarding sensitive export applications and works with the U.S. exporting community to structure approvable transactions within existing regulatory and policy guidelines.
During 1991, EL will process approximately 80,000 individual export license applications. This figure reflects recent Administration initiatives to enhance the competitiveness of U.S. exporters through the decontrol of low level, nonstrategic commodities. License applications for shipments to close U.S. allies (e.g., NATO and Japan) are generally approved quickly using BXA's state-of-the-art license application review systems. Applications to ship sensitive and technically intricate products, as well as for shipments to non-COCOM nations require interagency or COCOM review. The number of these applications may increase as we seek to increase the effectiveness of our controls on higher technology and/or politically sensitive items.

EL administers a broad special licensing regime which grants authority for multiple shipments to pre-approved overseas consignees for use in the form received, for re-export or for incorporation into foreign products. A number of different special licenses are available depending on the exporting scenario (e.g., capital expansion for a major project, servicing of airlines at terminals throughout the world, etc.). Foremost is the Distribution License (DL) now held by 550 firms permitting shipments of products to and among 18,000 consignees abroad. Because of the high volume of shipments and extended life of these special licenses, an extensive foreign and domestic review process is conducted to ensure adherence to applicable regulatory procedures, conditions, and policies. In addition to its direct licensing responsibilities, EL is responsible for coordinating BXA's outreach program to the domestic and international business community. EL provides the exporting community direct access to the licensing process through the Exporter Assistance Staff in Washington and special consultants located in each licensing branch. This ensures that exporters have detailed and accurate information about the Export Administration Regulations and their particular proposed shipments.

The Western Regional Office (WRO) also contributes to EL's outreach program on the West Coast. This office assists and counsels exporters on all aspects of export licensing. This office provides comprehensive counseling and assistance to the exporting community on a wide range of subjects including: (1) application processing; (2) emergency license application handling; (3) advisory opinions; (4) special and distribution licenses; (5) auditing of distribution licenses; (6) issuing Import Certificates; (7) coordinating seminars and workshops; and (8) overseeing forms publication and distribution.

EL is also responsible for managing BXA's Export Seminar Program. EL coordinates instruction and guidance to exporters about the Export Administration Regulations (EAR) through a series of scheduled domestic and overseas educational seminars and workshops; arranges "in-house" training courses on the EAR for DOC and other Federal officials; operates a foreign visitors program to brief foreign government officials on export control issues; and develops publications to better explain BXA licensing requirements to the domestic and international business community.

Technology and Policy and Analysis: Technology and Policy and Analysis (TPA) develops and implements overall policies for the licensing of exports. TPA also carries out technical reviews of the International Control List to determine whether commodities and technologies should be added, removed or revised for presentation to the Coordinating Committee on Multilateral Export Control (COCOM). Developing the technical rationale for control/decontrol of dual-use products in perhaps the most critical action performed by TPA, because it determines which products will require a validated license for export. TPA also reviews and analyzes precedent-setting licensing cases in the context of such controls, and when appropriate, provides written delegations to EL on the disposition of such cases.

TPA responds to advisory opinion/commodity classification requests from U.S. Exporters and U.S. enforcement agencies for specific information on what controls apply to specific products. Such classifications (which often involve complex technical judgments) protect national security by assuring that sensitive equipment is controlled, and promote economic well-being by assuring that low-level equipment may be freely exported. Classification is a critical function because it determines the licensing status of products for the duration of applicable regulations. Whereas a licensing action affects a particular shipment to a particular end user, one classification can affect thousands of transactions. By statute, commodity classifications must be completed within ten days.

TPA represents the Department on interagency and international groups dealing with national security and foreign policy issues, and provides administrative and technical support for the Technical Advisory Committees (TAC's) and the Subcommittee on Export Administration of the President's Export Council. TPA translates export policies into specific regulatory language. National security, foreign policy, and short supply controls as authorized under the Export Administration Act are administered through the Export Administration Regulations (EAR). TPA drafts, edits, and publishes the EAR, and provides guidance to the exporting community on significant policy changes that affect licensing procedures.

Foreign Availability: Foreign Availability (FA) analyzes the availability of goods controlled for national security and foreign policy purposes and evaluates all proposed new controls. The Act mandated a foreign availability program to ensure the competitiveness of U.S. high technology firms in world markets while maintaining the effectiveness of U.S. export controls. Foreign availability of a national security controlled item exists when a non-U.S. origin item of comparable quality is available to controlled countries in quantities sufficient to satisfy their needs, so that U.S. exports of this item would not contribute significantly to the military potential of such countries. FA is responsible for conducting research on foreign commodities and technologies and for analyzing these data for final assessment, and for collecting all the data needed to provide evidence for assessments.

Foreign availability studies are performed in support of the COCOM List Review process in order to: (1) assess new and on-going foreign policy controls; (2) evaluate proposed new national security controls; (3) initiate decontrol actions; and (4) recommend export control negotiations. As part of the COCOM List Review process, FA analyzes key commodities for their availability from uncontrolled sources. Assessments are responsive to claimants of foreign availability, evidence submitted in individual license applications, and to recommendations resulting from the List Review.

Although decontrol actions generally receive the most public attention, foreign availability studies are not only directed at formal decontrol assessments. They also focus on assessments of items proposed for new controls and items controlled for foreign policy purposes. FA is specifically mandated by section 6 of the Act to review proposals to impose or extend such controls. FA also reviews the effectiveness of foreign policy controls (i.e., likelihood of achieving their intended foreign policy purpose in light of foreign availability). In addition, FA undertakes assessments intended to evaluate proposed new foreign policy controls.

SUMMARY OF WORKLOAD AND PERFORMANCE DATA

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Export Licensing:			
License Applications Received/Processed:			
COCOM member country	29,903	17,500	17,500
Other free world	43,769	52,000	52,000
Bloc	5,422	4,500	4,500
PRC	6,124	6,000	6,000
Total	85,218	80,000	80,000
Disposition of License Applications:			
Approvals	74,717	73,000	73,000
Rejections	216	500	500
Returned Without Action	5,692	6,500	6,500
Pending applications	4,069	0	0
License referrals to other agencies	12,116	18,000	18,000
Non-referrals	73,102	61,850	61,850
Average Processing time (days):			
Free world requests	18	22	22
Bloc requests	53	55	55
PRC requests	42	43	43
COCOM requests	7	6	6
Special licenses-average processing time (days):			
Distribution licenses	21	21	21
Other special licenses	21	21	21
Special licenses:			
Currently held	1,033	1,033	1,033
Domestic reviews (audits)	109	100	100
Foreign reviews (audits)	61	50	50
Export Information and Services:			
STELA inquiries	260,000	260,000	270,000
Exporter Assistance Staff	100,000	100,000	70,000
Western Regional Office	60,000	60,000	60,000

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Export Licensing (continued):			
Export Seminars:			
Domestic	21	12	12
Overseas	8	8	8
One-day Seminars	0	14	14
Technology and Policy Analysis:			
Case referrals 1/	1,000	1,000	1,500
Commodity classifications processed	5,500	6,000	6,500
Average classification processing time (days)	10	10	10
Technical Advisory Committee (TAC) meetings	80	90	90
COCOM proposals	130	130	130
COCOM negotiations/meetings	88	90	90
Foreign policy reports to Congress	5	5	5
Foreign Availability:			
Reports to Congress	4	5	7
Foreign availability studies:			
Pre-assessment data gathering 2/	18	32	50
Formal claims initiated 3/	8	12	20
Completed 4/	9	12	20

Footnotes:

1/ FY 1989 estimate reflects a reduction in the number of licenses processed in OEL (25% reduction) as a result of decontrol measures.

2/ The Foreign Availability data gathering number indicates how many assessments are in the data collection stage, before the assessment has actually been initiated.

3/ The formal claims number corresponds to the number of Federal Register notices published announcing the initiation of an assessment and period for public comment.

4/ The study completed number reflects the number of assessments completed prior to the interagency review process.

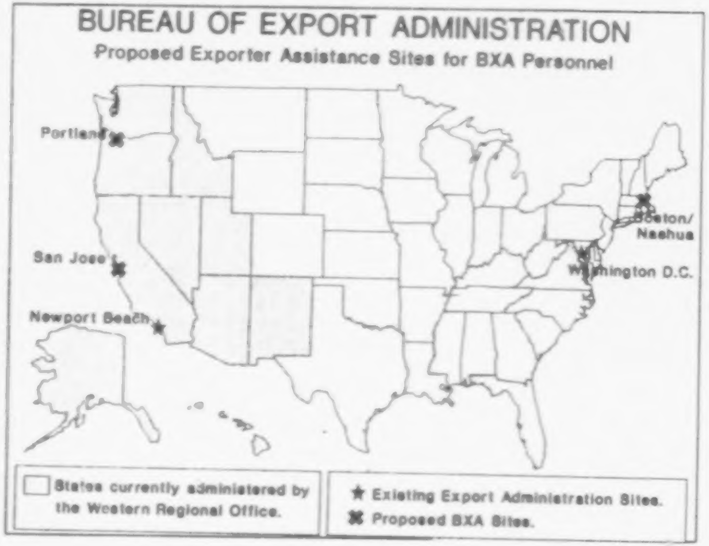
Increase for FY 1991
(Direct obligations in thousands)

		FY 1991 Base		FY 1991 Est.		Incr.(+)/Dec.(-)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Export Administration	Pos./BA	303	$23,100	313	$23,510	+10	+$410
	FTE/Obl.	294		304		+10	

Exporter Assistance Activities: (+10 positions, +$410,000) - This increase will enable BXA to comply with the stated wishes of the Congress by placing BXA personnel in three additional cities: Portland, Oregon; Boston, Massachusetts; and the Northern California region - San Jose, California.

In 1989 Congress directed BXA to open two new offices in Boston and Portland and appropriated $775,000 and 12 positions for this purpose. During FY 1989, the Department studied how to most effectively provide exporter assistance services. During the FY 1990 budget process, $550,000 in permanent budget authority and 12 positions were withdrawn from BXA's base even though Congress directed BXA to open offices in Boston, Portland, and Northern California. This left BXA with $225,000 in permanent base funding to maintain these offices.

During 1990, BXA will start the process of placing six additional export control specialists in Boston, two in Portland, and two in San Jose. In order to maintain these offices once all of the positions are filled, an additional 10 positions and $410,000 will be needed.These resources, when added to the $225,000 currently in the base, will enable BXA to maintain a viable presence in the three areas in question.


BUREAU OF EXPORT ADMINISTRATION
Proposed Exporter Assistance Sites for BXA Personnel
Portland
San Jose
Newport Beach
Boston/ Nashua
Washington D.C.
☐ States currently administered by the Western Regional Office.
★ Existing Export Administration Sites.
✖ Proposed BXA Sites.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Export Administration
Subactivity: Export Administration
Program Change: Exporter Assistance Activities

Object Class	FY 1991 Increase
11 Personnel compensation	
11.1 Full-time permanent	$263
11.3 Other than full-time permanent	0
11.5 Other personnel compensation	0
11.8 Special personnel services payments	0
11.9 Total personnel compensation	263
12.1 Civilian personnel Benefits	67
13 Benefits for former personnel	0
21 Travel and transportation of persons	5
22 Transportation of things	0
23.1 Rental payments to GSA	30
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	16
24 Printing and reproduction	1
25 Other services	18
26 Supplies and materials	5
31 Equipment	5
32 Lands and structures	0
33 Investments and loans	0
41 Grants, subsidies and contributions	0
42 Insurance claims and indemnities	0
43 Interest and dividends	0
44 Refunds	0
99 Direct obligations	$410

PROGRAM CHANGE PERSONNEL DETAIL

Activity: Export Administration
Subactivity: Export Administration
Program Change: Exporter Assistance Activities

Title:	Grade	Number	Annual Salary	Total Salaries
Export Administration Specialist	GS-11	3	$29,891	$89,673
Export Administration Specialist	GS-9	7	24,704	172,928
Total		10		262,601
Less lapse (00.0%)		0		0
Total full-time permanent: obligations		10		$262,601

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	10
Other than full-time permanent	0
Total	10

Authorized Positions:	
Full-time permanent	10
Other than full-time permanent	0
Total	10

Increase for FY 1991
(Direct obligations in thousands)

		FY 1991 Base		FY 1991 Est.		Incr.(+)/Dec.(-)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Export Administration	Pos./BA	303	$23,100	312	$23,988	+9	$888
	FTE/Obl.	294		300		+6	

Technology and Policy Analysis: (+9 positions, +$888,000) - An increase is requested to address new statutory obligations resulting from the passage of the Omnibus Trade and Competitiveness Act (OTCA); technology transfer issues related to biotechnology, computer software, and supercomputer technology; and private industry's expanded role in the development of export control policies. This increase is made up of the following components:

- Commodity Control List/Commodity Classification: (+8 positions, +$700,000) - The COCOM International List (IL) is made of 120 entries and divided into four segments--one segment (30 entries) is reviewed each year; the entire IL is reviewed every four years. Currently, to prepare a U.S. position for each COCOM segment, an average of twelve major interagency meetings are held each year. In reaching a Commerce position, industry is consulted via the Technical Advisory Committees (TAC's); on average, 80 meetings are held with the TAC's each year. As required by the 1988 Trade Act, in FY 1991 EA will review the Commodity Control List annually, as opposed to the present review cycle of four years. This represents a quadrupling of the annual effort presently expended in this List Review process. Over 350 entries representing every known technology must now be reviewed each year. Many entries have to be modified with respect to the present need for the control or to clarify the language in reflecting current technologies of concern. The current staffing level (27 engineers) is taxed to the point that on-going program goals are in danger of not being met. This requirement, in the absence of additional staff, will jeopardize EA's role in the development of export control policy. Without this increase, EA will not be prepared to support proposals to streamline the Control List Review process and focus on strategic technology.

  With the adoption of several new General License (GL) provisions, private industry has become reluctant to export in the absence of a determination by the Department that the commodity in question qualifies for shipment without a validated license under the terms of a GL. EA anticipates a significant increase in the number of requests for commodity classification determinations, and given the statutory requirement that these determinations be completed in ten days, additional technical staff is essential. The last introduction of a new General License led to an increase in determination requests from 3,000 to 6,000 in one year.

- Export Regulation Updates: (+$100,000) - This increase will enable BXA to issue more frequent export control bulletins updating export control regulations, and advising industry of changes in export policy that will permit U. S. exporters to take advantage of new market opportunities.

- COCOM Member Review/Decontrol: (+1 position, +$88,000) - This increase will enable BXA to meet new responsibilities imposed by the OTCA, as well as for submission of reports to Congress. A new requirement imposed by OTCA is the annual review of the export control programs of each COCOM member country to determine the effectiveness of those controls. At present, there is little comprehensive data on the control programs of our (17) COCOM partners. Extensive research into the actual application of foreign government export control authorities to the control of exports will require additional staff and resources.

  Submission of reports to Congress on decontrolled commodities (annual) and the (biannual) justification of unilateral U.S. controls (i.e., technical data) will require additional staff, as will the petition procedure imposed by OTCA which permits private industry to petition the Department to decontrol items not presently subject to interagency review. Within 90 days of the receipt of such a petition, Commerce must justify the retention of the controls, or affected items are automatically decontrolled.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Export Administration
Subactivity: Export Administration
Program Change: Technology and Policy Analysis Enhancements

Object Class	FY 1991 Increase
11 Personnel compensation	
11.1 Full-time permanent	$369
11.3 Other than full-time permanent	0
11.5 Other personnel compensation	12
11.8 Special personnel services payments	0
11.9 Total personnel compensation	**381**
12.1 Civilian personnel Benefits	106
13 Benefits for former personnel	0
21 Travel and transportation of persons	103
22 Transportation of things	0
23.1 Rental payments to GSA	51
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	22
24 Printing and reproduction	108
25 Other services	84
26 Supplies and materials	5
31 Equipment	28
32 Lands and structures	0
33 Investments and loans	0
41 Grants, subsidies and contributions	0
42 Insurance claims and indemnities	0
43 Interest and dividends	0
44 Refunds	0
99 Direct obligations	**$888**

PROGRAM CHANGE PERSONNEL DETAIL

Activity: Export Administration
Subactivity: Export Administration
Program Change: Technology and Policy Analysis Enhancements

Title:	Grade	Number	Annual Salary	Total Salaries
Engineer	GM-15	7	$63,164	$442,148
Engineer	GM-14	2	50,342	100,684
Total		9		542,832
Less lapse (33.0%)		(3)		(173,470)
Total full-time permanent: obligations		6		$369,362

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	6
Other than full-time permanent	0
Total	6

Authorized Positions:	
Full-time permanent	9
Other than full-time permanent	0
Total	9

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
Comparison by activity:		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Export Enforcement...........	Pos./BA	171	$14,378	201	$15,029	201	$15,259	201	$15,259	0	$0
	FTE/Obl.	180	15,330	199	15,688	199		199		0	

JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Export Enforcement

Goals and Objectives

Goal: The goal of this activity is to safeguard the national interest through effective enforcement of U.S. export control laws.

Objectives: Pursuant to the Export Administration Act of 1979, as amended, (the Act), the objectives of this activity are to enforce export controls for reasons of national security and foreign policy; take prompt, aggressive action against illegal export practices; oppose restrictive trade practices or boycotts; and harmonize enforcement on a multilateral basis.

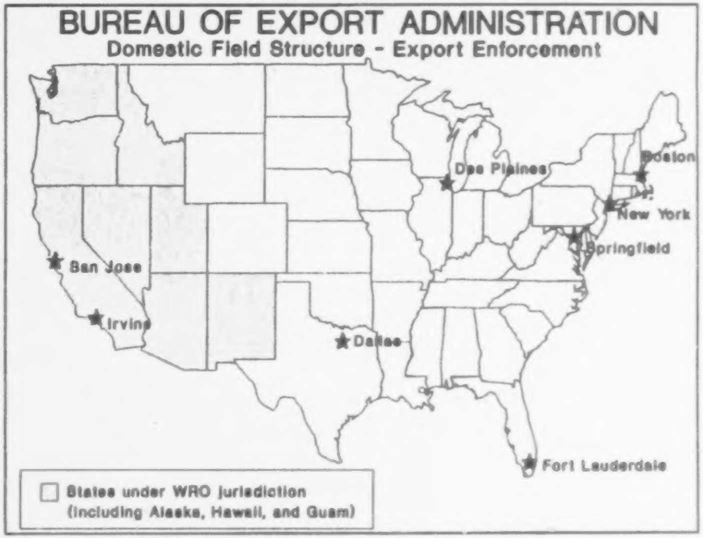
Base Program

The Export Enforcement (EE) activity detects and prevents the export or other illegal disposition of controlled U.S. goods and technical data in violation of the Export Administration Act, as amended (the Act), and its implementing Export Administration Regulations (EAR).

The major objectives of this program include: (1) increasing the number of criminal and administrative enforcement actions against known and suspected violators; (2) improving the proficiency of enforcement personnel in investigative and intelligence activities through the use of specialized training, better utilization of intelligence data, and by providing Special Agents and intelligence analysts with better law enforcement equipment and facilities; (3) effective targeting of enforcement efforts and resources through improved intelligence research and analysis; (4) improving enforcement cooperation with other COCOM members and with the export control and enforcement organizations of non-COCOM third countries; (5) increasing export control compliance through an aggressive public awareness program that encourages government/private sector cooperation by educating the public on the seriousness of violations, the available sanctions and penalties, and on ways to avoid violations; (6) making pre-license checks to determine the legitimacy of proposed recipients obtaining sophisticated U.S. origin goods and technology in order to prevent diversions; (7) making post-shipment verifications to determine if U.S. goods previously exported are in the approved locations and are being used in accordance with the terms and provisions of the relevant export license; (8) improving the cost-effectiveness of government-wide export enforcement efforts through the increased use of automated data processing and improved cooperation with other export control and enforcement agencies; and (9) reducing U.S. business participation in foreign boycotts through a comprehensive public awareness program that improves private sector understanding of the antiboycott regulations and by focusing efforts on the more serious antiboycott violations.

The activities of the Office of Export Enforcement (EE), Export Control Analysis (ECA) and Antiboycott Compliance (AC) are mandated by the Act. The resources and efforts of OEE and ECA are entirely dedicated to the enforcement of export controls administered by Commerce, while the efforts of AC are directed exclusively to enforcement of the Act's antiboycott provisions.

Export Enforcement: Effective export control enforcement is vital to protecting U.S. national security and foreign policy interests from the damaging effects of unlawful technology transfer to potential adversaries. A major activity of this program is the investigation of suspected export control violations with a view toward seeking the imposition of both criminal and administrative penalties against violators. To achieve the best possible return on the investment of resources, investigative activities are guided and supported through the analysis and dissemination of export licensing information and related intelligence research and intelligence operations.


BUREAU OF EXPORT ADMINISTRATION
Domestic Field Structure - Export Enforcement

Investigations are conducted by Criminal Investigators (Special Agents) from Export Enforcement's (EE) eight field offices located in major high technology exporting centers around the country (Los Angeles; San Jose; New York; Springfield, Virginia; Boston; Miami; Dallas and Chicago).

To further support our export control investigative efforts, we have established within EE, a staff consisting of a mix of Special Agents and Intelligence Research Analysts to gather and analyze intelligence information and serve as a central repository and point of contact for all intelligence information needed to identify/target suspects for enforcement investigations, to identify and close diversion networks and to enhance our efforts to prevent unlawful exports and diversions. Personnel work closely with other federal agencies involved in export controls such as the State Department, Customs Service, Department of Justice, FBI, Defense Department and the intelligence community.

During 1988, criminal indictments were obtained involving 26 defendants. There were 9 criminal convictions obtained of parties indicted either in 1988 or in prior years. A total of 45 final denial orders were issued which denied U.S. export privileges totalling 518 years and resulted in the imposition of punitive fines totalling $642,000; this included $136,000 in criminal penalties and $506,000 in civil penalties. These figures represent a significant increase over 1987 and are directly related to the additional presence of four new field offices and the intensive saturation of the territories they cover.

To enhance enforcement cooperation among the COCOM allies and Non-COCOM third countries, senior enforcement personnel frequently attend multilateral and bilateral meetings and initiate formal and informal exchanges with foreign counterparts. Export Control Attaches are stationed in Vienna and Stockholm to conduct timely and informed pre-license checks and post-shipment verifications. Attaches also serve to establish an effective and close working relationship with key officials of the host countries in the Attache's area of responsibility in order to maintain a favorable climate for cooperation on export control enforcement issues.

Export Control Analysis : Export Control Analysis (ECA) analyzes intelligence information as it relates to export licensing. This involves such activities as pre-license checks and post-shipment export verification checks, to determine the reliability of foreign consignees to receive sensitive U.S. technology, and enforcement screening of all export license applications to detect potential illegal exports. These preventive enforcement measures have been highly successful, resulting in decisions not to approve license applications for the export of high technology goods valued at billions of dollars. The increased concern over the export of chemicals and biological agents will seriously impact ECA. Only a small percentage of chemical exports require licenses. However, in 1988 approximately 1,800 applications for licenses to ship chemicals were received totalling about $68 million in exports. During this same time period approximately 600 license applications were received to export biological agents representing $600,000 in exports.

Antiboycott Compliance: The focus of the Antiboycott Compliance (AC) program is to uncover evidence of foreign boycotts, in violation of the Act with particular emphasis on pursuing those cases involving the most serious antiboycott violations such as refusals to deal with blacklisted businesses and religious discrimination. Violations of the antiboycott provisions of the Act may lead to criminal penalties. However, the enforcement actions to date have resulted in administrative sanctions including civil penalties or the imposition of periods of export denial. Cases warranting enforcement action are either settled with AC or referred to the Department's Office of General Counsel for the initiation of administrative compliance proceedings. AC also carries on extensive public education and counselling in antiboycott matters.

SUMMARY OF WORKLOAD AND PERFORMANCE DATA

Export Enforcement:	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Investigations closed (administrative/criminal action completed)	215	215	265
Cases referred to Justice Department for criminal action	10	10	14
Cases referred to Office of the General Counsel for administrative action	25	25	30
Denial orders issued (temporary, final & amendments)	45	45	50
Pre-license checks initiated	750	600	1,000
Pre-license checks completed	800	500	940
Post shipment checks initiated	400	450	400
Post shipment checks completed	320	360	280
License applications rejected due to OEE review:			
From enforcement review	300	300	275
From pre-license screening	175	125	125
Export value of above unapproved license applications:			
From enforcement review (000 omitted)	$ 800,000	$ 800,000	$ 800,000
From pre-license screening	$ 300,000	$ 250,000	$ 250,000
Boycott reports processed	12,000	12,000	12,000
Investigations completed 1/	117	50	40
Warning letters issued	40	40	32
Reporting notice advisory letters prepared 1/	73	300	275
Administrative fines imposed (000 omitted) 1/	$ 1,117	$ 300	$ 225
Consent agreements entered	20	20	15

1/ FY 1989 actual amounts are in direct correlation to the size and number of violations and cases encountered. FY 1990 and 1991 estimates appear minimal in comparison, but are based on cases that are expected to materialize.

PROGRAM AND PERFORMANCE: DIRECT OBLIGATIONS

(Dollar amounts in thousands)

Comparison by activity:		1989 Actual		1990 Currently Available		1991 Base		1991 Estimate		Increase/ (Decrease) over 1991 Base	
		Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount	Personnel	Amount
Industrial Resource Administration............	Pos./BA	24	$1,641	28	$1,864	28	$1,888	39	$2,723	11	$835
	FTE/Obl.	23	2,057	27	1,954	27		36		9	

JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Industrial Resource Administration

Goals and Objectives

Goal: The goal of this activity is to develop, promote and implement policies which ensure a strong and technologically superior defense industrial base, and to promote the overall national security preparedness programs of the Department of Commerce.

Objectives: The objectives of this activity are to: (1) analyze the impact of defense memoranda of understanding, foreign direct investment and related phenomena on defense industrial base viability (Supplemental Programs); (2) coordinate inter-agency response to defense trade issues to ensure appropriate emphasis on industrial preparedness (Supplemental Programs); (3) evaluate specific industries' ability to respond to current and anticipated national security requirements (Section 232/Industrial Capabilities); (4) ensure that defense-critical projects have priority access to scarce industrial resources (Priorities and Allocations); (5) evaluate national security implications of reliance on foreign energy sources (Energy Security); (6) analyze the impact of military offset agreements on U.S. industrial competitiveness (Military Offsets); (7) develop plans to operate and staff government's enhanced industrial resource responsibilities during a national emergency (Emergency Preparedness/National Defense Executive Reserve); (8) ensure that the National Defense Stockpile contains the appropriate mix of strategic and critical materials (Stockpile); and (9) promote industrial preparedness planning with our allies (North Atlantic Treaty Organization).

Base Programs

Industrial Resource Administration (IRA) is the key unit within BXA responsible for developing and carrying out policy initiatives to ensure that U.S. defense industries are able to meet current and projected national security requirements. IRA works to ensure that impacts (economic, trade and technology) on the defense industrial base are given due consideration alongside foreign policy and national security concerns.

IRA further meets BXA's national security preparedness responsibility by identifying bottlenecks to industrial production which would be critical in the event of a national security crisis. BXA recommends trade and production capacity policy actions to alleviate identified shortfalls. Specific programs to support national security preparedness include:

o Section 232/Industrial Capabilities -- under authority of Section 232 of the Trade Expansion Act of 1962, IRA investigates the impact of imports on national security (i.e. the impact on the U.S. defense base's current and projected ability to meet defense needs). The President has authority to "adjust imports" to remove identified national security threats based upon the Secretary's findings and recommendations. The 1988 Trade Act requires us to complete our investigations within 270 days (replacing an earlier one year deadline), and establishes a new 90 day deadline on Presidential decision making. In addition, IRA takes the lead on activities related to operation of the Section 232-inspired machine tool voluntary restraint agreements with Japan and Taiwan. IRA analyzes company requests for special issue licenses and other exceptions to the agreements, represents BXA at international consultations, and prepares policy recommendations on related issues including possible expansion of limits to other countries or products and appropriate U.S. response to VRA violations by Japanese and Taiwanese exporters.

Under the related Industrial Capabilities program, IRA assesses the capabilities of defense related industries to meet national security requirements and evaluates their overall competitiveness. These studies assess the various factors which effect the capacity of critical industries including foreign competition, protectionism abroad, domestic industry practices and other economic conditions at a micro-economic level. In addition, IRA monitors the supply conditions of critical industries for purposes of implementing the Export Administration Act's short supply provisions.

o Priorities and Allocations -- under Title I of the Defense Production Act, the Defense Priorities and Allocations System Regulations have been established to ensure that the military can obtain the resources and products needed for national defense, both now and in time of national emergency. The program assures that industry assigns priority to the production of military hardware and other defense items, and that scarce resources are allocated first to national security-critical projects. This priority system has enabled defense programs to limit cost overruns and remain on schedule.

o Energy Security -- IRA is responsible for evaluating the national security implications of U.S. dependence on foreign energy sources, with particular emphasis on petroleum, natural gas and uranium feedstocks for nuclear fuel. IRA recommends policy initiatives to encourage increased domestic production and obtaining energy from reliable sources, while discouraging dependence on potentially unstable foreign producers.

o Military Offsets -- under Section 309 of the Defense Production Act , the President must report annually to Congress on the effects of military offset agreements on U.S. industrial competitiveness, defense preparedness, employment and trade. There is evidence that offsets (co-production, technology transfer and licensing) are eroding the U.S. defense industrial base both at the prime and subcontractor level. In addition to new offset-related responsibilities described under Supplemental Programs, IRA provides Commerce's input to this ongoing effort.

o Emergency Preparedness/National Defense Executive Reserve -- IRA spearheads Commerce's effort to develop, evaluate and refine programs to meet government's enhanced industrial resource responsibilities during a national emergency. OIRA prepares readiness plans for the emergency control of industrial production and distribution, and to ensure the continuity of government operations during a national emergency. IRA recruits and trains the National Defense Executive Reserve, a skilled cadre of industry executives prepared to serve as senior managers of government industrial resource efforts. IRA also participates in inter-agency readiness exercises to train senior policy officials and evaluate our ability to respond appropriately during a national emergency.

o National Defense Stockpile -- IRA provides Commerce input into activities related to policy development and ongoing operation of the National Defense Stockpile, a holding of strategic and critical materials unavailable domestically in sufficient quantities. IRA conducts analyses of mobilization planning factors used for Stockpile goal setting and other national security planning purposes; chairs the inter-agency Market and International Political Impact Subcommittee which reviews the impact on foreign and domestic markets of planned Stockpile acquisitions and disposals; and undertakes reviews of other critical material issues such as implementation of Anti-Apartheid Act provisions determining national security exemptions to prohibitions on trade with South Africa.

- North Atlantic Treaty Organization -- IRA has the responsibility for the coordination of international industrial preparedness planning between the United States and its NATO allies. IRA represents the United States on NATO's Industrial Planning Committee which works to ensure inter-operability of member nation military arsenals, and to encourage the maintenance of sufficient defense base production capacity in member nations.

SUMMARY OF WORKLOAD AND PERFORMANCE DATA

Industrial Resource Administration:	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Priorities assist and rating authorizations/actions	1,800	1,800	1,800
Industry production capacity studies	10	10	10
Stockpile material analyses conducted	140	140	120
Stockpile technical documents	20	22	0
NDER training conferences held	10	10	12
Regulatory audits, compliance and training actions	70	80	75
U.S. preparedness plans	6	6	6
International (NATO) Production Base Studies	30	30	30
Sections 232, Investigations	3	3	3
Interagency and NATO readiness coordination exercises	35	35	35
Trade-Offset and co-production assessments	12	15	15
Third country trade control studies	25	20	0
Stockpile market input analyses	40	35	35
Defense industry evaluations	35	60	60
Mandated Congressional and Presidential reports	10	8	20
Memoranda of Understanding reviews	50	80	110
Foreign investment investigations	15	30	50
Offset impact studies	2	3	4
Offset country policy reviews	3	7	10
Sustainability assessments	10	10	30
Technology transfer assessments	15	30	50
Congressional inquiries	50	75	100
Industry outreach initiatives	10	3	5

Increase for FY 1991
(Direct obligations in thousands)

		FY 1991 Base		FY 1991 Est.		Incr.(+)/Dec.(-)	
		Pers.	Amount	Pers.	Amount	Pers.	Amount
Industrial Resource Administration	Pos./BA	28	$1,888	39	$2,723	+11	+$835
	FTE/Oblig.	27		36		+9	

Industrial Resource Responsibilities: (+11 positions, +$835,000) - An increase is proposed to enable EA to meet its expanded industrial base responsibilities as required by provisions of the Omnibus Trade Act of 1988, the Defense Authorization Act of 1989, and amendments to the Defense Production Act of 1950.

U.S. industrial might has been and remains the cornerstone of the country's national security and deterrence posture. Our industrial preeminence and technological leadership have for many years been accepted as a given. But the United States is no longer unchallenged in the global arena, as evidenced by our massive trade deficits, declining "smokestack" industries, increasing reliance on foreign products and capital, and inability to compete in word markets.

There is a growing awareness in the Congress and in the country as a whole that existing Government policies regarding the defense industrial base are no longer effective. These policies, many of which have been in place since the onset of the Cold War, have not kept pace with changes in the world economy. Congress has begun to take action in a number of areas designed to ensure a healthy, competitive industrial base able to meet defense and civilian demands. Congressional action ranges from increased emphasis on education of our young people (human capital) to encouraging development of emerging technologies (superconductors, HDTV).

Several pieces of legislation relate specifically to the Department of Commerce's role in maintaining a competitive defense industrial base including: (1) the Omnibus Trade Act of 1988 that establishes new responsibilities for Commerce in the areas of assessment of the impact of foreign investment on the U.S. defense industrial base and national security, development of policy options regarding an appropriate Administration strategy for counter-trade and offsets, and in the analysis of the trade, economic and industrial competitiveness impacts of offsets on U.S. national security; (2) the Defense Authorization Act of 1989 that greatly expands IRA's responsibilities for the assessment of the trade, economic, and industrial competitiveness impacts resulting from memoranda of understanding governing defense cooperation between the U.S. and foreign governments (this act also provides for a Commerce role in negotiations to limit the adverse effects of offsets on the U.S. industrial base); and (3) the Defense Production Act of 1950 and related Executive Order 12656 mandates IRA's responsibilities for the performance of industrial base assessments, industrial mobilization analyses and greater participation in industry-related civil emergency preparedness activities.

Assignment of these responsibilities to Commerce reflects a recognition on the part of the Administration and Congress that policies aimed at achieving or maintaining our industrial competitiveness and global leadership are as important to national security as tanks and missiles. Generally, the new policies provide for increased emphasis on the economic and industrial base aspects of our relationships with our allies and trading partners, better coordination with other Government agencies, and an acknowledgement that sometimes Government intervention in the marketplace is necessary to preserve our national security interests.

The diverse capabilities that exist within the Department of Commerce make it uniquely situated to respond to the economic and technological challenges that face us today. Within the Department, BXA is the lead organizational element for defense industrial base issues. IRA is assigned the analytical and policy development functions that are central to successful performance of BXA responsibilities in this area.

This increase is made up of three major components:

o MOU Governing U.S. Defense Cooperation with Foreign Governments -- An increase of 9 positions and $700,000 is necessary to enable EA to meet expanded work requirements resulting from enactment of the Defense Authorization Act of 1989, and a related interagency agreement between Commerce and the Department of Defense.

The Defense Authorization Act of 1989 requires that memoranda of understanding between the United States and foreign governments for defense-related trade, research and development, co-development or co-production be examined to determine their effects on the U.S. industrial base. In some cases, these agreements have been used by our allies for technological, industrial, and economic benefits, and have had a detrimental effect on some sectors of the U.S. economy.

The FSX Co-development Agreement with Japan is an excellent example: Japan is in the position to reap invaluable technology and production experience with far-reaching commercial applications from this project, while U.S. industry would be largely excluded from participation inthe areas in which it could benefit. Inclusion of the Department of Commerce in the MOU process in addition to the Department of Defense is intended to ensure that these agreements do not have the unintended effect of harming our key industries.

Recent experience in performing this function during the course of analyzing the FSX Agreement demonstrated that providing for adequate review and analysis of the effects of cooperative agreements on the defense industrial base is a complex process which requires: (1) consultation with the Department of Defense and other civil agencies on memoranda of understanding; (2) performing technical analyses of the effects of proposed memoranda of understanding on U.S. trade and industrial competitiveness; (3) developing approximately 150 industrial base assessment reports per year for the Department of Defense on the trade, economic and industrial competitiveness impacts of proposed memoranda of understanding with foreign governments; (4) providing Commerce representatives for the negotiation teams which formulate memoranda of understanding with foreign governments; (5) providing Commerce representatives for technical steering committees which provide oversight related to the implementation of memoranda of understanding for the co-production or co-development of weapons systems and other defense products; and (6) developing Commerce policy positions, in consultation with other Commerce elements, on bilateral arms sales, co-production and co-development programs of the USG.

o Foreign Investment Assessments -- One position and $60,000 is required to meet statutory requirements under the provisions of Section 5021 of the Omnibus Trade Act of 1988 and Section 721 of the Defense Production Act of 1950, as amended.

The Omnibus Trade Act of 1988 amends Title VII, Section 721 of the Defense Production Act of 1950 to provide the President with the authority to undertake investigations of mergers, acquisitions, and takeovers within 30 days of notification of the proposed investment and to complete the investigation within 45 days to determine the effect of foreign investment on national security. This legislation is intended to ensure that the implications of foreign control of industries essential to our national defense are fully considered. This is especially important today in light of rapidly expanding foreign investment in this country, particularly in high technology sectors. It is development within these high technology sectors that enable the United States to maintain its qualitative edge in defense systems and competitive advantage in the commercial realm.

An interagency committee, chaired by Treasury, is the sole organization tasked with analyzing the long-term implications of foreign investment in the defense industrial base. The Department of Commerce must take a major role in this committee, as it is the lead Executive Branch agency tasked with ensuring the long-term viability of the industrial base.

IRA is the Commerce organizational element responsible for performing analyses and providing guidance on the effects of foreign direct investment transactions on national security and the health and competitiveness of the U.S. defense industrial base. This complex responsibility will involve: (1) performing industrial base analyses (50 per year) on a quick response basis; (2) preparing reports and policy position papers; (3) representing BXA on the Commerce Foreign Investment Working Group; (4) supporting Commerce representation on the interagency Committee on Foreign Investment in the United States (CFIUS); and (5) providing policy guidance on the effects of foreign investment on the U.S. defense industrial base as required.

o Offsets in U.S. Defense Trade -- One position and $75,000 will enable IRA to meet its expanded responsibilities under statutory authorities set forth in the Defense Production Act of 1950, the Defense Authorization Act of 1989, and the Omnibus Trade Act of 1988.

These statutes require that Commerce, in cooperation with other civil agencies and the Department of Defense, chair a committee to analyze the effects of offsets and counter-trade on the U.S. defense industrial base and develop policy options for the President and Congress. Also mandated by Congress is initiation of negotiations with our allies to limit the adverse effects of offsets on the defense industrial base.

Offsets are industrial compensation practices mandated by foreign governments when purchasing U.S. defense systems. Through the use of offsets (co-production, licensing, subcontracting, investment) our allies (and chief competitors) have acquired new technologies, increased business and market opportunities, and increased employment at the expense of U.S. firms. Offsets are also inefficient, leading to creation of duplicate manufacturing facilities and split production runs. An example of an offset is Japanese co-production of the F-15 fighter aircraft. Although it cost three times as much for Japan to produce each plane as to buy it from the U.S. manufacturer (in times of restricted defense budgets), it was considered worthwhile to do so because of the aerospace experience, technology, and infrastructure obtained. Recent legislation attempts to limit the adverse affects of these practices on the defense industrial base through negotiation with our allies and development of other policy recommendations.

IRA is the lead organizational element in the Department for the assessment of the effects of military offsets and the U.S. defense industrial base which will involve: (1) performance of in-depth industrial impact assessments; (2) development of Commerce policy positions on offsets in defense trade; (3) chairing the interagency group on defense offsets; (4) development of the Commerce contribution to the President's annual report to the Congress on the impacts of offsets in international defense trade; and (5) coordination of BXA activities in the offset area with ITA and other Commerce organizational units involved in the counter-trade issue. 31 U.S.C. 1343(a) prohibits the purchase of passenger motor vehicles unless specifically authorized by the appropriation concerned or other law with the exception of those for the use of the President of the United States, the secretaries to the President, or the heads of the executive departments.

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollars in thousands)

Activity: Industrial Resource Administration
Subactivity: Industrial Resource Administration
Program Change: Industrial Resource Responsibilities

Object Class	FY 1991 Increase
11 Personnel compensation	
11.1 Full-time permanent	$372
11.3 Other than full-time permanent	0
11.5 Other personnel compensation	10
11.8 Special personnel services payments	0
11.9 Total personnel compensation	**382**

12.1 Civilian personnel Benefits	106
13 Benefits for former personnel	0
21 Travel and transportation of persons	61
22 Transportation of things	0
23.1 Rental payments to GSA	70
23.2 Rental payments to others	0
23.3 Communications, utilities and miscellaneous charges	37
24 Printing and reproduction	10
25 Other services	126
26 Supplies and materials	7
31 Equipment	36
32 Lands and structures	0
33 Investments and loans	0
41 Grants, subsidies and contributions	0
42 Insurance claims and indemnities	0
43 Interest and dividends	0
44 Refunds	0

99 Direct obligations	$835

PROGRAM CHANGE PERSONNEL DETAIL

Activity: Industrial Resource Administration
Subactivity: Industrial Resource Administration
Program Change: Industrial Resource Responsibilities

Title:	Grade	Number	Annual Salary	Total Salaries
Division Director	GM-15	1	$69,086	$69,086
Engineer/Sr. Trade Analyst	GM-14	2	55,376	110,752
Economist	GM-14	1	50,342	50,342
Industrial Specialist	GS-13	4	42,601	170,404
Emergency Coordinator	GS-12	1	41,795	41,795
Industrial Research Analyst	GS-12	1	37,019	37,019
Secretary	GS-05	1	17,937	17,937
Total		11		497,335
Less lapse (25.0%)		(2)		(124,863)
Total full-time permanent: obligations		9		$372,472

Personnel Data	
Full-Time Equivalent Employment:	
Full-time permanent	9
Other than full-time permanent	0
Total	9

Authorized Positions:	
Full-time permanent	11
Other than full-time permanent	0
Total	11

Department of Commerce
Bureau of Export Administration
Operations and Administration
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Direct obligations in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ Decrease
Personnel compensation:			
11.1 Full-time permanent	$19,166	$20,170	$1,004
11.3 Other than full-time permanent	780	780	0
11.5 Other personnel compensation	996	1,018	22
11.8 Special personnel services payments	0	0	0
11.9 Total personnel compensation	**20,942**	**21,968**	**1,026**
12.1 Civilian personnel benefits	3,472	3,751	279
13.0 Benefits for former personnel	0	0	0
21.0 Travel and transportation of persons	1,019	1,188	169
22.0 Transportation of things	101	101	0
23.1 Rental payments to GSA	3,177	3,328	151
23.2 Rental payments to others	353	361	8
23.3 Communications, utilities			
and miscellaneous charges	841	910	69
24.0 Printing and reproduction	553	672	119
25.0 Other services	9,801	9,385	(416)
26.0 Supplies and materials	484	501	17
31.0 Equipment	2,139	2,208	69
32.0 Lands and structures	0	0	0
33.0 Investments and loans	0	0	0
41.0 Grants, subsidies and contributions	0	0	0
42.0 Insurance claims and indemnities	0	0	0
43.0 Interest and dividends	0	0	0
44.0 Refunds	0	0	0
99.0 Subtotal, Direct Obligations	**42,882**	**44,373**	**1,491**
Reimbursable Obligations	350	350	0
99.0 Total Obligations	**43,232**	**44,723**	**1,491**

Department of Commerce
Bureau of Export Administration
Operations and Administration
SUMMARY OF REQUIREMENTS BY OBJECT CLASS
(Dollar amounts in thousands)

	1991 Base	1991 Estimate	Increase/ Decrease Over 1990 Base
Personnel Data			
Full-time Equivalent Employment:			
Full-time permanent	524	549	25
Other than full-time permanent	27	27	0
Total	551	576	25

Authorized Positions:			
Full-time permanent	537	567	30
Other than full-time permanent	27	27	0
Total	564	594	30

Exhibit 15

Department of Commerce
Bureau of Export Administration
Operations and Administration
DETAILED REQUIREMENTS BY OBJECT CLASS
(Obligations in thousands)

Object Class	1991 Base	1991 Estimate	Increase/ Decrease
11 Personnel compensation:			
11.1 Full-time permanent:			
Executive level	$85	$85	$0
Senior executive service	820	820	0
General schedule	17,898	18,902	1,004
Senior foreign service	0	0	0
Foreign service staff	363	363	0
Foreign service nationals	0	0	0
Consultants & experts	0	0	0
Students	0	0	0
Subtotal	19,166	20,170	1,004
11.3 Other than full-time permanent:			
General schedule	780	780	0
Wage board	0	0	0
Experts & consultants	0	0	0
Hourly	0	0	0
Subtotal	780	780	0
11.5 Other personnel compensation:			
Overtime	548	563	15
SES performance awards	0	0	0
Cash awards	129	136	7
Merit pay awards	0	0	0
Other	319	319	0
Subtotal	996	1,018	22
11.8 Special personnel services payments:			
Foreign service officers (State)	0	0	0
Other	0	0	0
Subtotal	0	0	0
11.9 Total personnel compensation:	20,942	21,968	1,026

Mr. SMITH. Here to testify in support of this request is Dennis E. Kloske, Under Secretary for Export Administration. Since this is your first appearance before this Committee, we will insert your biographical sketch into the record at this point, and then you may proceed with your statement.

[The biography of Mr. Kloske follows:]

BIOGRAPHY OF DENNIS EDWARD KLOSKE, UNDER SECRETARY FOR EXPORT ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Dennis Edward Kloske was nominated to be Under Secretary for Export Administration by President Bush July 14, 1989. He was confirmed by the United States Senate September 12, 1989.

As Under Secretary, he has principal responsibility for devising and implementing the Department's policies and programs for export administration. These programs span national security, foreign policy, and short supply export controls, as well as enforcement of the antiboycott laws and regulations. He is also responsible for Commerce Department programs which focus on formulation, coordination and implementation of all policy issues related to the defense industrial base and U.S. cooperative defense trade. These programs ensure that U.S. industrial resources are available to meet national security requirements.

Since 1987, Kloske has been Deputy Under Secretary of Defense for Planning and Resources, and served concurrently as Special Advisor for Armaments to the Deputy Secretary of Defense.

Prior to this, he was detailed in 1987 to the White House as Advisor to the Special Counselor to the President. From 1985-1987, Kloske served as Special Advisor for Armaments to the United States Ambassador to NATO, and served concurrently as Special Advisor for NATO Armaments to the Deputy Secretary of Defense, 1986.

From 1983-1985, he served as Special Assistant to the U.S. NATO Ambassador. Kloske has also served as Director of Strategic Planning at the Center for Strategic and International Studies.

Kloske was graduated from Harvard College (B.A., 1976). From 1977-1979, he attended Oxford University as a Rhodes Scholar. In January 1989, Kloske was awarded the Medal for Distinguished Public Service, the highest civilian award in the Department of Defense, and in October 1989, he was awarded the Great Cross of Military Merit by the King of Spain for his contributions to strengthening Spanish-American relations.

OPENING STATEMENT

Mr. KLOSKE. Yes, sir, and I would respectfully ask to submit it for the record——

Mr. SMITH. Yes, sir.

Mr. KLOSKE [continuing]. And just constrain myself to a few remarks.

I would like to present to the committee my two very able colleagues who make life very easy for me, Joan McEntee, Deputy Under Secretary for Export Administration, and Mr. Robert Kugelman, Director of Administration.

CHANGES IN EASTERN EUROPE

Mr. Chairman, these are momentous times for this Nation, but it is clearly a momentous time for the Bureau of Export Administration because of the changes that are taking place in the East-West context and the technology revolution that is going on within the Western context is putting this Bureau at the forefront of a lot of activities that have a direct impact on the American high technology industrial base.

As you are aware, sir, the Bureau for Export Administration is responsible for regulating America's high technology exports. Last

	1991 Base	1991 Estimate	Increase/ Decrease
12.1 Civilian personnel benefits:			
Civil service retirement	1,870	2,020	150
Federal employees' retirement	106	115	9
Thrift savings plan	70	76	6
Federal insurance contribution act	282	305	23
Health insurance	988	1,067	79
Life insurance	36	39	3
Employees' compensation fund	14	14	0
Other	106	115	9
Subtotal	3,472	3,751	279
13.0 Benefits for former personnel:			
Severance pay	0	0	0
Unemployment compensation	0	0	0
Other	0	0	0
Subtotal	0	0	0
21.0 Travel and transportation of persons:			
Common carrier	357	416	59
Mileage	5	6	1
Per diem/actual	474	553	79
Vehicular	173	202	29
Other	10	11	1
[Overseas estimates]	[150]	[150]	[0]
Subtotal	1,019	1,188	169
22.0 Transportation of things	101	101	0
[Overseas estimates]	[30]	[30]	[0]
23.1 Rental payments to GSA	3,177	3,328	151
23.2 Rental payments to others	353	361	8
23.3 Communications, utilities and miscellaneous charges			
Rental of ADP equipment	76	82	6
Rental of office copying equipment	4	4	0
Other equipment rental	219	237	18
Federal telecommunications system	235	254	19
Other telecommunications services	93	101	8
Postal Service by USPS	193	209	16
Other	21	23	2
[Overseas estimates]	[100]	[100]	[0]
Subtotal	841	910	69

	1991 Base	1991 Estimate	Increase/ Decrease
24.0 Printing and reproduction:			
Publications	166	202	36
Public use forms	122	148	26
Envelopes	17	21	4
Other	249	302	53
[Payments to GA, WCF]	[63]	[63]	[0]
[Overseas estimates]	[8]	[8]	[0]
Subtotal	553	672	119
25.0 Other Services:			
Training:			
University	0	0	0
Office of personnel management	8	7	(1)
Other	98	80	(18)
Maintenance of equipment	1,372	1,122	(250)
GSA reimbursable services	0	0	0
ADP services	1,568	1,282	(286)
Telecommunications services	0	0	0
Payments to GA, WCF	5,489	5,681	192
Other Federal Agencies	980	980	0
Other	286	233	(53)
[Overseas estimates]	[186]	[186]	[0]
Subtotal	9,801	9,385	(416)
26.0 Supplies and materials:			
Office supplies	150	155	5
ADP supplies	136	141	5
Other	198	205	7
[Overseas estimates]	[20]	[20]	[0]
Subtotal	484	501	17
31.0 Equipment:			
Office machines and equipment	1,091	1,126	35
ADP hardware	963	994	31
ADP software	0	1	1
Other	86	88	2
[Overseas estimates]	[30]	[30]	[0]
Subtotal	2,139	2,208	69

		1991 Base	1991 Estimate	Increase/ Decrease
32	Lands and structures	0	0	0
33	Investments and loans	0	0	0
41	Grants, subsidies and contributions	0	0	0
42	Insurance claims and indemnities	0	0	0
43	Interest and dividends	0	0	0
44	Refunds	0	0	0
99	**Subtotal, Direct Obligations**	**42,882**	**44,373**	**1,491**
	Reimbursable Obligations	350	350	0
99	**Total**	**$43,232**	**$44,723**	**$1,491**

Department of Commerce
Bureau of Export Administration
Operations and Administration
Average Grade and Salaries

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Average ES salary	$75,180	$77,886	$78,187
Average GS grade	9.13	9.01	9.17
Average GS salary	$28,244	$27,827	$28,432
Average salary of ungraded positions	0	0	0

Average grade and salary established by the Foreign Service Act of 1980 (22 U.S.C 801-1158):

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Average Senior Foreign Service salary	0	0	0
Average Foreign Service grade	5.60	4.30	4.30
Average Foreign Service salary	$33,525	$36,328	$36,328
Average Salary in foreign countries	$28,177	$31,690	$31,690

Bureau of Export Administration
Operations and Administration
CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Consulting services	$55	$60	$70
Management and professional services	0	0	0
Special studies and analyses	192	0	0
Management and support services for research and development	0	0	0
Total	247	60	70

Export Administration uses consulting services to meet relatively short-term requirements which focus on very narrow areas. Therefore, it is preferable to maintain the ability to obtain short-term expertise rather than a permanent staff capacity.

Consulting Services: These services will be used to provide technical support for the ECASS system ($25,000 in FY 1990; and $35,000 in FY 1991) and to provide educational material to be used in the field by the export licensing program ($35,000 in FY 1990; $35,000 in FY 1991).

Special Studies and Analysis: In FY 1989 a study was conducted by Price Waterhouse to determine the alternatives BXA has for the delivery of Export Administrative Services in the field.

Department of Commerce
Bureau of Export Administration
Operations and Administration

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	FY 1988 Actual	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Periodicals	$48	$67	$70	$70
Pamphlets	20	29	30	30
Audiovisuals	0	0	0	0
Total	68	96	100	100

Export Administration publications, periodicals, and pamphlets are one of the most essential tools through which the organization fulfills its mission to administer U.S. statutes and agreements dealing with export controls.

The major publications (periodicals) produced by Export Administration are the Export Administration Regulations (EAR), which account for the bulk of Export Administration periodical costs. These regulations play an essential role in keeping the community and the public informed on particular aspects of export control issues.

Pamphlets are primarily used to educate the business community on the functions performed by the Export Administration program and are distributed through Export Administration's export seminars program; by the U.S. and Foreign Commercial Service during individual business counseling sessions; and by Export Administration officials who are participating in training seminars, giving speeches at public functions, and answering questions from the business community regarding Export Administration programs.

year we processed around $210 billion worth of export licenses. Everything that we do in terms of administering the regulatory regime has a direct impact on the research and development that takes place in the high technology base, and, needless to say, its profitability through exports.

Again, because of the dramatic changes that are taking place in the East-West context, we expect to be extremely busy this year in all sorts of areas. The three principal ones that we are going to be addressing for fiscal year 1991 will be in the area of providing advice to America's high technology companies as they search for new markets, namely, in Eastern Europe, and perhaps eventually in the Soviet Union, depending on how the regulatory regime policy develops, and there is a tremendous demand for this licensing expertise.

We will be looking to doing substantial work in the area of technology assessment, Commodity Control List review, and working together with the rest of the agencies within the administration to develop new policy approaches within COCOM. And, finally, as the process of liberalization moves forward, we expect our Export Enforcement Division to be very busy in terms of verifying safeguard agreements that may be developed in Eastern Europe.

FY 1991 REQUEST

As you have noted, sir, we are asking for around $44 million for fiscal year 1991, and they will be centered in three areas in terms of the increases should we obtain it: $410,000 for field offices that we intend to open in Santa Clara, Portland, and New England to provide a wide range of services to America's high technology industry in these areas; around $880,000 for the areas of list reviews, streamlining regulations, and COCOM negotiations; and, finally, and this is a new area for the Bureau of Export Administration, as you know, we are the lead in Commerce in dealing with the Department of Defense for assessing defense cooperation ventures.

We took the lead within Commerce in negotiating the FSX arrangement with the Department of Defense. We also took the lead in negotiating the arrangements on the Korean fighter airplane. This is a major new area for the Bureau of Export Administration, and we are seeking $835,000 to support those activities.

[Additional information on the FSX study follows:]

FSX STUDY

BXA represented the Department of Commerce (DOC) on an interagency review of the original agreement with Japan. This review, jointly chaired by the Department of Defense (DOD) and DOC, focused on the technology transfer aspects of the proposed FSX program, as well as the potential impacts of the program on the U.S. industrial base.

The review team clarified the FSX Memorandum of Understanding (MOU) in the areas of workshare, technology flowback, and the definitions of technology. These clarifications were accepted and approved by the U.S. and Japan.

BXA has been designated as a member of the Technology Steering Committee (TSC), which monitors and oversees implementation of the agreement. BXA officials participated in both TSC meetings held since approval of the FSX MOU.

Mr. KLOSKE. That concludes my testimony. I would be happy to answer any questions you may have.

[The prepared statement of Mr. Kloske follows:]

PREPARED STATEMENT BY DENNIS E. KLOSKE
UNDER SECRETARY OF COMMERCE
FOR EXPORT ADMINISTRATION

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

Mr. Chairman and members of the subcommittee, I am here to testify on behalf of the Bureau of Export Administration's budget request for fiscal year 1991 -- a total of 594 permanent positions and $44,373,000.

The Bureau of Export Administration (BXA), entering its third year, has a mission of critical importance: to protect our strategic technology while allowing freedom of U.S. business to export commercial goods overseas to new and emerging markets. Our ability to carry out the Bureau's mission in the decade of the 1990's will prove to be a challenge, given the nature of the changing worldwide political and economic climate.

Over the past years, BXA has responded to business and industry by improving its system for processing license applications, removing restrictions where they were not necessary, and providing outreach programs while at the same time insuring compliance with export control requirements. The average license processing time has gone down from 60 days in 1984 to 16 days currently for all destinations. This represents a significant reduction in the economic cost to the U.S. economy associated with U.S. export controls. During FY 1989, BXA processed 85,831 applications with a dollar value of $202.2 billion. In addition, over 800 pre-license checks were completed in 1989 which blocked the export of hundreds of millions of dollars worth of commodities or high technology. The coming years will be equally demanding: BXA will need to provide effective and realistic export controls and licensing procedures while, at the same time, protecting our national security.

The Bureau of Export Administration's request for Fiscal Year 1991 fully supports the efforts of the Department and the Administration to reduce the overall Federal deficit. Our budget request is roughly $2.9 million higher than our 1990 appropriation. The budget changes proposed for 1991 are minimal. We are requesting the following increases: $410,000 to provide exporter assistance services in the field offices, $888,000 to meet additional responsibilities related to the Commodity Control List Review, COCOM review and decontrol issues, and $835,000 for responsibilities relating to the review of offsets in defense trade and direct foreign investments in defense-related industries and Memoranda of Understanding between the United States and foreign governments. A decrease of $642,000 is proposed as a partial offset to these increases.

The Bureau of Export Administration budget has four program activities: Management and Policy Coordination (MPC); Export Administration (EA); Export Enforcement (EE); and Industrial Resource Administration (IRA).

MANAGEMENT AND POLICY COORDINATION

This activity develops, analyzes, and coordinates policies relating to BXA's mandate. Through the offices of the Under Secretary and Deputy Under Secretary for Export

Administration, this program develops, monitors, and coordinates the preparation of studies, reports, and testimony; formulates, coordinates and implements policy, program, and regulatory activities; directs, coordinates, and monitors participation in interagency activity; and represents the Department of Commerce and U.S. Government in both national and international fora.

Management and Policy coordination activities provide direction and guidance to the programmatic activities discussed below. However, the positions of Under Secretary and Deputy Under Secretary often are called upon to take the lead in program implementation activities.

Proposed Changes in Management and Policy Coordination

The proposed decrease of $642,000 reflects BXA's commitment to support this Administration's efforts to limit Federal spending. This decrease will be treated as a partial offset to the increases being proposed elsewhere in the budget.

EXPORT ADMINISTRATION

This activity has direct responsibility for: (1) operation of the export licensing system whereby goods and technical data controlled for reasons of national security, foreign policy, or short supply are approved or denied a license to be shipped in international commerce; (2) analyses and development of technical parameters of goods and technology subject to control, drafting of regulations and representation of the Bureau in numerous interagency and international fora on such controls; and (3) analyses of the foreign availability of controlled goods or technology for the purpose of assessing the need for continuation of controls. Significant program improvements have been made during the last year. These include:

- Removal of export controls on mid-level desk-top personal computers. These computers were determined to be widely available to controlled countries from a variety of foreign sources. This was the result of an availability assessment initiated by BXA in response to a strong interest by industry and evidence of widespread availability of these computers. Through this action, BXA created new opportunities for U. S. manufacturers to sell more widely abroad and increase their competitiveness.

- Initiation of regulatory reforms instituted, in compliance with the 1988 Trade Act, to simplify export licensing. BXA has published an array of changes on export controls that collectively eliminate thousands of export licenses and affect tens of billions of dollars in export sales. These reforms included lifting restrictions on shipments to U.S. allies, removal of licensing requirements for items that had been controlled unilaterally for as long as 25 years or more, and liberalization of controls on items produced abroad that incorporate U.S. parts or components. This greatly reduced the export licensing burden on U.S. exporters and their foreign customers.

- Industry's involvement in our export control system is being enhanced. The ten BXA sponsored industry-government Technical Advisory Committees (TACS) now play an integral role in virtually all aspects of the export control system, including list review, the issuance of regulations, licensing procedures,and foreign availability. A new special assistant position was created in the Office of the Assistant Secretary for Export Administration to coordinate all TAC activities and to ensure that BXA utilizes the support provided by the TACS to the maximum extent possible.

- U.S. and multilateral efforts underway to stem nuclear missile proliferation. Stopping the proliferation of ballistic missiles is a priority of BXA and this Administration. In coordination with other Federal agencies and the six other supplier countries that constitute the Missile Technology Control Regime, BXA is working to stem the flow of multilaterally-designated equipment and technology to countries that are attempting to develop nuclear capable missiles.

- Controls are necessary to curb the spread of chemical and biological weapons. Export controls have been imposed on 23 chemicals and 5 classes of biological agents that can be used in the manufacture of chemical and biological weapons. These controls were established as a result of the lead taken by the United States at a recent conference in Paris which addressed the chemical weapons proliferation problem on a multilateral basis.

Proposed Changes in Export Administration

We are proposing increases totalling 19 positions and $1,298,000 for our Export Administration programs.

Included are 10 positions and $410,000 to enable BXA to provide exporter assistance services in Portland, Oregon; the New England states; and the Northern California region. This will increase our exporter assistance activities in the field and enable BXA to comply with the stated wishes of the Congress, as enacted in our 1990 Appropriation Bill.

An increase of 9 positions and $888,000 is proposed to address statutory obligations resulting from the passage of the Omnibus Trade and Competitiveness Act (OTCA). This includes dealing with technology transfer issues related to the Commodity Control List and Commodity Classifications, issues related to biotechnology, computer software, and supercomputer technology, and private industry's expanded role in the development of export control policies. Of this request, $100,000 is proposed to enable BXA to issue more frequent export control policy information and export control regulations that will permit exporters to take advantage of new market opportunities.

EXPORT ENFORCEMENT

This activity enforces the U.S. export control program. It is comprised of export enforcement intelligence functions, investigations, and outreach programs. Export Enforcement's mission is to prevent and/or detect the illegal export of controlled U.S. goods or technology. Export Enforcement plays a significant role in carrying out this mission by investigating breaches of export control laws and by analyzing intelligence to assess diversion risks. Additionally, this program administers and enforces the antiboycott provisions of the Export Administration Act. We are not requesting any program increases for Export Enforcement at this time.

During the past eight years, Export Enforcement has experienced significant growth and has developed a strong enforcement and prevention program. Significant program improvements have been made during the last several years. These include:

o Tremendous change and expansion in its organizational status, its size and the scope of its mission. Since 1983, pursuant to reorganization and statutory mandates, Export Enforcement has developed from a small Compliance Division to a major law enforcement organization under an Assistant Secretary within the Bureau of Export Administration. Export Enforcement has expanded its substantive role commensurately, establishing investigative offices in eight U.S. cities, working overseas to assist other countries in strengthening their export control systems, and taking on greater responsibilities in COCOM enforcement efforts.

- During FY 1989, Export Enforcement completed over 800 pre-license checks and blocked the export of hundreds of millions of dollars worth of commodities or high technology where consignees were shown to be unreliable. Further, fines of export control violations totalled approximately $1.0 million.

- Export Enforcement has improved coordination with various other Federal law enforcement agencies such as Customs, the FBI, Defense Intelligence Agency, Federal Maritime Commission, CIA, and the Department of the Army. This coordination includes information exchange regarding companies or individuals suspected of illegal export activity, and parties who are involved in illegal exports.

- Violators of export regulations receive criminal and administrative penalties resulting from export enforcement. During FY 1989, prosecution actions resulted in 10 arrests, nine indictments, six convictions, and $138,000 in criminal fines. In addition, 66 individuals and businesses received various administrative sanctions for export violations, including denial of export privileges, and $383,000 in administrative penalties.

- "Operation Outreach" is an enforcement initiative developed to encourage exporters to report suspicious circumstances that may provide leads in the prevention of the illegal export of many strategic goods.

- Program responsibilities also include enforcement of the antiboycott provisions of the Export Administration Act of 1979, as amended, and related regulations prohibiting U.S. corporate or individual participation in unsanctioned boycotts against countries friendly to the U.S. During 1989, this program completed 117 enforcement actions resulting in administrative fines totalling $1.1 million.

INDUSTRIAL RESOURCE ADMINISTRATION

This activity has the responsibility for managing the overall national security preparedness program of the Department. The United States' ability to maintain our national and economic security is clearly linked to the strength and vitality of our defense industrial base. Our strategic reliance on qualitative superiority over potential adversaries demands that the U.S. industrial base continue to maintain state-of-the-art technological capability. The Office of Industrial Resource Administration operates to ensure the availability of industrial resources for national emergencies and for national defense, energy, and other priority sectors. Significant recent accomplishments include:

- Participating, during the past five years, in the preparation of the Administration's annual report to Congress on the impact of military offsets on the U.S. economy.

- Providing support to the Secretary of Commerce on an interagency review of the FSX (Fighter Support Experimental) co-development agreement with Japan. The

Secretary co-chaired the review, which was mandated by the President at the request of the Secretary. As a result of this action, the agreement was modified to strengthen the prohibition against the flow of sensitive aerospace technology to Japan and enhance the flowback of desirable aerospace-related technology from Japan to the United States.

- Participating in an interagency group which assesses the impact of proposed foreign investments on the national security.

- Conducting investigations of the impact of imports on national security under authority of Section 232 of the Trade Expansion Act of 1962, as amended. Also, continued work in administering the Section 232 inspired machine tool voluntary restraint agreements with Japan and Taiwan.

- Provided Special Priorities Assistance (SPA) to ensure that certain approved defense or energy projects receive priority access to required materials and facilities. During the past year, BXA worked with industry (producers of critical equipment such as rocket propellant mixing machines, and critical materials such as ammonium perchlorate) in support of critical programs such as the Air Force Titan IV and Delta II rockets and the Navy Trident D5 missile program.

Proposed Changes to Industrial Resource Administration

In order to meet the expanded industrial base responsibilities as required by provisions of the Omnibus Trade Act of 1988, the Defense Authorization Act of 1989, and amendments to the Defense Production Act of 1950, an increase of 11 positions and $835,000 is proposed for the Office of Industrial Resource Administration. These responsibilities relate to the review of offsets in defense trade, defense MOU and direct foreign investments in defense-related industries.

Of this amount, 9 positions and $700,000 will enable BXA to meet expanded work requirements relating to Memoranda of Understanding (MOU) between the United States and foreign governments concerning defense-related trade, research and development. These MOU's must be examined to determine their effects on the United State's industrial base. Section 5021 of the Omnibus Trade Act authorizes the President to prevent certain mergers, acquisitions and takeovers of U.S. companies by foreign interests when they might impair national security. We are currently estimating that fifty MOU's will be reviewed by BXA in 1991. One position and $60,000 is needed to perform analysis and provide guidance on the effects of foreign direct investment on the U.S. defense industrial base. Finally, one position and $75,000 is needed to assess the effects of military offsets on the U.S. industrial base and our commercial competitiveness.

Mr. Chairman, this concludes my prepared testimony. I would be happy to answer any questions you may have regarding the programs of the Bureau of Export Administration.

OVERLAP OF ACTIVITIES

Mr. **Smith**. How much overlap is there in all these activities you are doing, and is it necessary and good to have this overlap?

Mr. **Kloske**. Overlap, sir?

Mr. **Smith**. Other people doing some of the same things you are doing.

Mr. **Kloske**. You mean within the Department of Commerce or within the administration?

Mr. **Smith**. Well, anywhere in the Federal government.

Mr. **Kloske**. Well, the regulatory regime that we are currently operating under basically involves the Bureau of Export Administration, the State Department and the Department of Defense. Needless to say, there are consultative activities that go on on a daily basis. Sometimes there is a lot of overlap and you end up in the situation where you have three bureaucracies superimposed upon each other.

When it works, it works well. When it doesn't work, it doesn't work well at all. And we run into problems in terms of providing services to industry in terms of licensing and technology determination.

Mr. **Smith**. Is there any way to make it better operationally?

Mr. **Kloske**. Well, if, as we sail into the 1990s, the parameters upon which we operate the Export Administration Act—export controls are driven by the threat assessment and, if it gets to a point, or at least some senior members of the administration have indicated that the threat is diminishing—at least they have done so on the record—then we should be able to be in a situation where the level of concurrence, discussions and negotiations that go on with the other agencies will be diminished significantly.

Mr. **Smith**. So you will do more just on your own then?

Mr. **Kloske**. We will exercise our authority and consult with the other agencies when necessary, but not exhaustively or comprehensively as in the past.

Mr. **Smith**. Does it hold you up a great deal?

Mr. **Kloske**. In some areas it does tie up the regulatory regime, I would say in an extreme fashion it represents a significant burden for the industry, particularly when you get into the area of missile technology proliferation and supercomputer licensing.

We work closely with the Department of State and Department of Defense.

Mr. **Smith**. Has being required to interface with them resulted in a different conclusion or different action than there would have been otherwise?

Mr. **Kloske**. Sure. Of course. You have three agencies that operate under three different jurisdictions with three different philosophies and world views. You can expect, if the consensus breaks down, to obtain gridlock.

All right, let me come back to supercomputers. We have currently an array of licenses caught up in the regulatory regime that have not been approved for over a period of two years.

Mr. **Smith**. Why? Let's use that as an example. Tell us how that has worked.

Mr. **Kloske**. Well, because again you have several inputs from the various agencies in terms of intelligence sensitivity, in terms of whether they have a problem with the level of risk that may be involved, in terms of their appreciation of that foreign nation, its reliability and problems of diverting that risk, and when you have several agencies like that who get involved in this process, you have to drive it to the lowest common denominator and usually end up in gridlock. There is just no agreement.

Mr. **Smith**. You reach the conclusion that certain things should be exported, right?

Mr. **Kloske**. Yes, within certain parameters and certain conditions.

Mr. **Smith**. And then they start objecting to certain items on the list; is that it?

Mr. **Kloske**. Yes, that is correct.

Mr. **Smith**. Can you take action on the ones they don't object to?

Mr. **Kloske**. Yes, sir, we can. In terms of East-West export controls, at certain levels of technology we can take action.

Mr. **Smith**. And you just have some remaining ones that are not resolved?

Mr. **Kloske**. Right. In the area of foreign policy controls, the way that we operate under the Export Administration Act, needless to say, we rest on the advice of the State Department. The State Department needs to consult with other agencies and sometimes they don't obtain proper inputs, so it can be tied up for a significant amount of time.

SUPERCOMPUTERS

Mr. **Smith**. Well, what has happened in this case you are using as an example?

Mr. **Kloske**. I just received notification from the Under Secretary for Science and Technology indicating that he would like to proceed forward. I also got a telephone call from another agency saying, "Please don't proceed to call around until you hear from our principal."

Mr. **Smith**. It is not a formal submission then. Some of this is done by telephone?

Mr. **Kloske**. Yes, sir. And my response to them was, "If you can submit it to me in writing, I would be more than willing to address that issue."

POLICY COORDINATING COMMITTEE

Mr. **Smith**. Well, now you have got these councils—what do you call them?—within the administration? Three or four Cabinet members make up a council, Economic Policy Council. Do they try to resolve these things at that level?

Mr. **Kloske**. In this particular area, no, sir. The Economic Policy Council is not involved. What we have is a series of policy coordinating committees, and in the area for the Bureau of Export Administration we have two, Mr. Chairman. We have one that is chaired by a member of the National Security Council, and then we have another one that is chaired by Ambassador Bartholomew. The one for Ambassador Bartholomew is in missile technology proliferation issues, and the one for the National Security Council deals with East-West export controls.

CABINET-LEVEL COUNCILS

Mr. **Smith**. So you don't have a Cabinet-level council that is really over them?

Mr. **Kloske**. If you obtain gridlock, which happens from time to time, these issues are then elevated to a deputy's committee, and if there is still no agreement there then it is elevated to the President, and then he has the option to meet with his Cabinet Secretaries in this matter.

Mr. **Smith**. All of this takes a lot of time?

Mr. **Kloske**. All of this takes a long time.

CHANGES IN EASTERN EUROPE

Mr. **Smith**. Well, what has happened with regard to loosening of export controls on high technology?

Mr. **Kloske**. The Administration is considering the liberalization of export controls to Eastern Europe at this stage. We have made a series of proposals to our allies in the COCOM, and we are currently negotiating with them to see how fast, how soon, at what levels, and under what conditions we can liberalize export controls for Eastern Europe.

The consensus is that, obviously, we need to do something.

These nations are desperate to modernize their obsolete infrastructures and they wish to become integrated into the Western economic mainstream, and they need to have modern economies. You cannot have a modern economy these days without access to Western technology. They are not going to turn to the Soviet Union.

The administration is committed to assisting the durable and rapid economic transformation of these nations, and one of the things that we are working very hard at, again, is making sure that we can loosen up the very tight export controls that have been imposed on the Eastern Bloc.

Now, having said that, the position of the administration is also to impose a differential which we are willing to consider on the proper safeguards and under certain conditions. The liberalization of export controls towards Eastern European countries, as far as the Soviet Union is concerned, we will take a very prudent and cautious approach and it is mainly case by case.

Mr. **Smith**. You think the approach, then, of dealing with an Eastern European country is not very similar to dealing with the Soviet Union?

Mr. **Kloske**. That is correct, sir. In the last 12 months we have been able to witness the political democratization of these nations where, basically, the Communist Party in most instances seem to be either on the run or withering away. A series of elections are going to take place in Eastern Europe and that will confirm this political reform process.

Most of the nations in Eastern Europe are also committed to a process of economic reform, more or less, than a mixed economy and capitalist principles. We do not see that in the Soviet Union.

Mr. SMITH. Well, are these decisions then being made on the basis of whether you like the political situation in the country or on the basis of security of the technology?

Mr. KLOSKE. The administering of export controls is done basically on a threat assessment. And I would submit that as far as the Eastern European members of the Warsaw Pact are concerned, their military capabilities are a total shambles. They have other things to worry about, except being members of the Warsaw Pact. They also have indicated, and we will see how this progresses, that discussions are ongoing right now of withdrawal of Soviet troops from Eastern Europe.

So, in terms of the classic threat that we have been accustomed to in the last 40 years, the Eastern European portion is not really significant.

Now, we have another area that we have to be very careful of. That is if we do intend to liberalize export controls, and I think we will liberalize export controls to Eastern Europe, we don't want Eastern Europe to serve as a point of transshipment into the Soviet Union.

TRANSFERRING KNOWLEDGE

Mr. SMITH. Well, that is what I am getting at. I mean, whether you like what is going on in Eastern Europe or not is a totally different question as to whether or not transferring knowledge to those countries would almost immediately end up——

Mr. KLOSKE. Well, this is a potential risk and we have to face it. At the same time, the administration has developed a series of safeguard procedures. We have contacted each of the East European governments that have shown interest in adopting export enforcement regimes very much like they exist in the West, so that when eventually that technology begins to flow into Eastern Europe they will have procedures in place, legal, administrative and enforcement-wise, to protect Western technology.

At the same time, we have also indicated to each of these Eastern European nations that have shown interest in export enforcement regimes that we intend to conduct on-site verification and inspection for the sensitive technologies.

FOREIGN AVAILABILITY

Mr. SMITH. If we don't get this technology that you are talking about that you are considering licensing or loosening up on, is it not available from some other country?

Mr. KLOSKE. I would say that at this stage, at the lower levels of the lists, technologically speaking, there are sources of foreign availability.

Mr. SMITH. There aren't really a whole lot of technologies that we have a monopoly on, are there?

Mr. KLOSKE. No.

Mr. SMITH. How long do you think this process is going to take, on making decision as to whether or not you loosen up on these?

Mr. KLOSKE. Well, as I indicated to you, Mr. Chairman, the discussions and negotiations are taking place. We are awaiting the presentation of a formal national security review, which is being conducted by the intelligence community and the Joint Chiefs of Staff, that should provide more specific guidance.

Mr. SMITH. How long would that ordinarily take?

Mr. KLOSKE. It is due to us by the end of this month.

Mr. SMITH. And what would be the next step?

Mr. KLOSKE. I am sure that the results and conclusions of this assessment will be presented to the President and his Cabinet Secretaries and they will make a decision as to the levels of streamlining, taking the controlled commodities off the list that needs to take place.

While this is taking place, at the same time we are having discussions with our allies on COCOM and there will be a series of high level meetings, one in May and one in June, to reach, hopefully, a level of accord with our allies as to how fast and how soon we are going to proceed with liberalization towards Eastern Europe.

COMMODITY CONTROL LIST

Mr. SMITH. So some things will come off of the list in the next couple of months, but some things will still be on the list——

Mr. KLOSKE. Yes, sir.

Mr. SMITH [continuing]. And under consideration for several months.

Mr. KLOSKE. That is correct.

Mr. SMITH. Mr. Early.

LICENSE REQUESTS

Mr. EARLY. Thank you, Mr. Chairman.

Mr. Kloske, I had two very sensitive license requests from a company in my district. One was for the PRC. They couldn't have gotten more cooperation. Your staff was just outstanding as far as helping the company, looking at the problems—and there were a lot of problems. They gave them some guidance and set up appointments, and both licenses were approved. If there was anyone within the private sector that looked and said what outstanding people were in a Federal agency it was the people that dealt with your agency, and I just want to put that on the record.

Mr. KLOSKE. Thank you. I just signed a memo, sir.

Mr. EARLY. All the boss has to do is recruit good people. I mean, if you recruit good people, you will be very good.

Mr. KLOSKE. Yes, sir.

Mr. EARLY. You recruit bad people and you have some problems.

Mr. KLOSKE. Yes, sir. Well, I must tell you I spent six and a half years at the Department of Defense, and the Department Defense, as you know, has a rather macho outlook toward the other agencies, and I must say that one of the most pleasant surprises about coming to Commerce and to the Bureau of Export Administration is the high quality of management and leadership and industry outreach that takes place in this agency. It is really astonishing how good they are.

Mr. EARLY. Well, you see the whole thing, Mr. Kloske. I can only tell you about one of the few times where an employer just couldn't be more complimentary.

Mr. **Smith**. And were you aware until today he was under Commerce? [Laughter.]

Mr. **Kloske**. Sir, I am willing to learn something every day.

Mr. **Early**. Let me tell you, it was a small business that got the help. It was really——

NEW FIELD OFFICES

Mr. **Kloske**. Well, if I could say something, Mr. Congressman, one of the areas that we are trying to push very hard for this year and the next year is the opening of our export assistance offices in New England, Santa Clara, and Portland, to make sure that we can provide the level of technical assistance to smaller companies. Because most of the bigger companies all have big export enforcement divisions and export assistance and things like that.

One of the concerns that I have in running the Bureau of Export Administration is how many small companies that are at the cutting edge of technology innovation, and, by the way, the main source of technology in this country today is the smaller companies that have a sense and a liking for risk. How many of them don't export because they are intimidated with this extremely comprehensive, expensive and, occasionally, arbitrary export control and regulatory regime that we have?

One of the things that we have to do this year and next year is provide them with quality service and outreach to make sure that when they are ready to take their product to the market, and when they are ready to export, that we can guide them through the maze of regulatory export controls so they can move forward.

And it is daunting. Because if they do it wrong, my export enforcement people are going to go after them and, in some cases, deny them exporting privileges, in some cases arrest people, and/or impose very stiff fines.

Mr. **Early**. We all talk like that but very few do it. However, your group has done it in the two specific cases. And I am sure the company would have been intimidated and would have backed off, but they got some encouragement, and assistance, from your staff—as far as telling them where to go, giving some guidance on what they needed to do—really, it is a compliment to your agency.

Let me ask you specifically about a couple of things.

Mr. **Kloske**. Yes, sir.

G-R-H SEQUESTER

Mr. **Early**. Because the agency jumped out at me as so constructive, I really scrutinized your justification a little more. Page 4 of your justification, shows a sequestered amount of $584,000. However, on page 7 it summarizes adjustments to the base and it indicates a reduction of $717,000.

Now, are you losing more than the amount actually sequestered in 1990 from your base in 1991?

Ms. **McEntee**. I believe the difference in the figures is the sequestration of 584 which was spread pretty much across the board. The 642, which is I think what we are talking about is basically because we have two outstanding studies that would come to fruition that we can live without. So we sort of self-impose that 642.

BASE CUT

Mr. **Early**. But that is an actual cut in the base?

Mr. **Kugelman** That is not an actual.

Mr. **Kloske**. The number that he is referring to, Joan, is larger. The hit in 1991 is larger than it was in 1990, than is the sequester in 1990. So we are losing additional monies out of our base in 1991.

Mr. **Early**. Are you concerned about it at all?

Mr. **Kloske**. Well, Mr. Congressman, we all recognize that we are living through stringent times. I am much more interested at this stage in making sure that we have the resources and the leadership to meet the challenges that we are facing this year, and most of them are going to be trying to keep up with this tremendous pace of change so we can position the agency to not only influence that level of change that we were talking about, Mr. Chairman; i.e., the levels of technology that need to be liberalized with proper safeguards, but more importantly, and sometimes we lose sight of this, I need to transmit that information to the industry on a time urgent basis so they can position themselves to go off and exploit those new markets that are developing while they can ratchet up the level of exports. And at this stage, with the level of funding that we are seeking, we think we can do the job.

Mr. **Early**. Let me then get to a couple of the disallowances. Okay?

Mr. **Kloske**. Yes.

OVERSEAS POSITIONS

Mr. **Early**. One was provided in a previous appropriation bill for, I believe, seven overseas positions for prelicense checks and post-validation shipment. Have all these positions been assigned and filled?

Mr. **Kloske**. No.

Mr. **Early**. Why don't you provide for the record why all of the positions are not filled.

Mr. **Kloske**. Sure.

[The information follows:]

Overseas Positions

In 1984, the International Trade Administration (ITA) established export attache positions in Vienna and Stockholm under the management of the Office of Export Administration.

In FY 1987, Congress authorized an additional 7 positions and $1,200,000 to conduct pre-license and post-shipment checks and to perform export administration functions overseas. Since that time we have expanded our overseas operations and opened additional offices in New Delhi and Bern. We also have requested State Department approval for placements in Paris (COCOM) and Hong Kong.

Negotiations with the State Department and these countries to obtain the necessary clearances are very time consuming and have resulted in placement delays.

ENFORCEMENT EFFORT

Mr. **Early**. And what you think the consequences are of not filling them. Tell the committee what the problem is. It would seem to me that this would be an important part of the compliance and enforcement effort.

Mr. **Kloske**. Yes, it is. As a matter of fact, we have it under review in the Bureau and have earmarked funds and identified certain personnel who can go into Eastern Europe and provide the local authorities with the necessary level of advice first. And, secondly, for the incoming business community from the United States, the level of expertise and also the knowledge, so they understand what levels of technology can go into it.

This is absolutely crucial, because one of the areas where American businesses have always been disadvantaged in the last 10 years is that they are never really sure how, when, and under what conditions they are going to get their export license.

Mr. Early. And if you don't do that, how will the exporter know—

Mr. **Kloske**. That is absolutely right, and that is one of my top priorities. That is right. We have earmarked the funds, we have selected the people, and now we are just waiting for the assessments to go forward and to get clearance from the State Department.

MILITARY OFFSETS

Mr. **Early**. In the justification you state that there is evidence that military offsets—coproduction, technology transfer and licensing, are eroding the U.S. industrial base both at the prime and subcontract level. How serious a problem is that?

Mr. **Kloske**. Well, that is—we have to be very careful how we examine the whole issue of offsets. When I was at the Department of Defense, one of my responsibilities was to worry about joint defense cooperation. We were very concerned that most of the allies were far more interested in facilitating their own industrial bases from certain commercial deals; i.e., they would buy one of our helicopters and say, "That's fine, but now you have to teach us how to make the helicopter." We have seen the demand of offsets proliferating throughout the Western world to the point where they have become political footballs.

Politicians in Western Europe like to point to the fact that when they were in government they demanded 130 percent offset from the American industry that had won the contract. And what we have seen again in the last five or six years is that, whether it is the United Kingdom or Turkey, at some point they say, "Fine. We are willing to buy that piece of American equipment while you facilitate our industry."

Now, as it turned out to be, some of these big offset demands that have been generated are not as onerous as they may seem when you read the fine print. The offsets are offsets in the competitive sense, saying, "We are going to give you 60 percent offset value on this contract, but we are not going to give you the money. You are going to have to compete against the American subcontractor for this kind of activity."

Now, if we have a proliferation of offsets throughout the Western world, it creates a hardship for the second and third vendors in this country, and there is just no doubt about that. Because what happens is that the principal contractor can go and win the contract, but then the original second and third tier contractors who are sworn to support that contractor may have gone overseas.

So I am personally very concerned that we have to make sure that we communicate our concerns to other governments who are part of the alliance in saying that offsets are not necessarily very efficient and they do significant harm all the time to the second and tertiary tier of our defense industry.

Now, as you may know, Secretary Mosbacher has worked very actively with Secretary of Defense Cheney to limit the offset demands that were made by the Korean government on the Korean fighter airplane, and that was a real success.

But it is a problem all the time, particularly when you get into the nuts and bolts areas.

Mr. Early. I have some other questions that I will provide for the record. But again, Mr. Kloske, I really want to compliment you and your staff. They were outstanding.

Mr. Kloske. Thank you, sir.

OMB REQUEST

Mr. Smith. What did you request of OMB?

Mr. Kloske. Around $47 million, sir.

Mr. Smith. What does that difference represent? What did they cut out?

Mr. Kloske. We wanted to place some computer specialists in our export enforcement field offices. One of the really salient features about the Bureau of Export Administration is that it is the only agency in the whole administration that has a fully automated information distribution and processing system. It is state of the art.

ENFORCEMENT OFFICER

Mr. Smith. How many of those offices do you have?

Mr. Kloske. For export enforcement, I think we have six.

Mr. Kugelman. Eight.

Mr. Kloske. That is right. Eight. And on the enforcement side, they have a tremendous database which they maintain and update working together with the intelligence community.

Mr. Smith. And what did you want that you didn't get for them?

COMPUTER SPECIALISTS

Mr. Kloske. They cut back on the computer specialists to maintain the data base.

Mr. Smith. Well, can you maintain the database without it?

Mr. Kloske. I think we can. It was a matter of just consolidating our resources a bit better.

Mr. Smith. I see.

Mr. Kloske. We also took a hit on the engineering staff, our Technology and Policy Assessment Division. I must tell you, and this is just again from my observation being at the Department of Defense and now being at Commerce, we are going to face a problem in terms of administering for the government to the industry if we continue to run into these salary differentials that exist, and I will just give you an example.

ENGINEER SALARIES

Washington, D.C., Mr. Chairman, the Greater Washington area, has emerged as the number one software design and integration belt in the United States. Now, one of the more sensitive areas that we have to work in is in the determination of how sensitive that software is in allowing it for shipment. Where do I get software engineers when the average software engineer in Washington, D.C., is being paid $120,000?

Mr. SMITH. What are you paying?

Mr. KLOSKE. I think we are lucky if we pay them $35,000. And that is one of the problems.

Mr. SMITH. Does it help them get a better job if they are with you a while or not?

Mr. KLOSKE. Of course. We train them for two years and we do a great job, and there is a tremendous demand for them in the private sector.

I mean, export controls is an extremely complex and arcane subject matter which ties directly into the profitability and export capabilities of a lot of companies.

Mr. SMITH. So you are continually training?

Mr. KLOSKE. We operate the best farm team in the business.

But, coming back to the engineering staff, I would be extremely happy if we can continue to invest in good engineers, bring them in young, dynamic and vigorous into the organization, and, hopefully, be able to compensate them.

ENGINEER CLASSIFICATION

Mr. SMITH. What kind of engineers are these?

Mr. KLOSKE. Oh, they range from computer engineers to software design engineers to machine tools.

Mr. SMITH. I see.

Mr. KLOSKE. Again, our Technology Policy Assessment Division basically has to classify the commodities, and that requires two things: one, that we have very capable engineers; and, secondly, that we remain abreast of the technology developments that are taking place within U.S. industry.

And one of the most fascinating things that is happening right now, Mr. Chairman, is that this country is going through a second technological revolution. For example, in the area of computer development, the capabilities are just skyrocketing in terms of exponential capabilities, and the regulatory regime is just trying to catch up in terms of providing regulations. That is why we require good, solid engineers; and, secondly, that we stay in touch with industry almost on a day-to-day basis.

You may or may not be aware of this but, for example, the state of the art 10 years ago in terms of the supercomputers was the Cray I. I mean, it was one of the crown jewels of this country. Cray is now donating that Cray I to the Smithsonian Museum. Intel has just developed a small chip, which is no bigger than this, that today has the same processing capability as that Cray I. And, 14 years ago, you needed a room of this size, the cooling systems and so forth, to install Cray I, and that little chip now has the same processing capability.

So you have a tremendous explosion of technology going on in this country, and BXA is responsible for regulating it.

Mr. SMITH. There sure has been. I don't know if you knew it or not, but the original inventor of the computer was at Iowa State University when he invented it. He still is. He is 86 or 87 years old.

Mr. KLOSKE. He probably didn't apply for an export license. That is why he is in such good health.

Mr. SMITH. He wasn't young at the time and he still isn't.

Mr. KLOSKE. Yes, sir.

Mr. SMITH. And that computer is probably as big as this room.

Mr. KLOSKE. Yes, sir. So, again, we are looking always to acquire additional engineers and engineers that have expertise. So that is one area where we probably could have benefitted from the input.

EXPORT ASSISTANCE FIELD OFFICES

Mr. SMITH. Well, now tell me abut these Export Assistance Offices. How many of them are there?

Mr. KLOSKE. Well, we have one right now, which is extremely successful. We call it the Western Regional Office, which operates in Newport Beach, California, with around 14—and they do a tremendous amount of business. Now, California is very important in terms of a regulatory regime because they, themselves, generate on an annual basis, around $55 billion worth of export license requirements. So our first targeted effort was to work in California.

We are going to open sometime in May or June a collateral office at Santa Clara; i.e., Silicon Valley, to make sure that, again, as these regulatory changes are taking place and these changes in Eastern Europe, that we can provide firsthand expertise to the industry in this very important area.

We are also going to open a small office in Portland, Oregon, and we are also going to open an office later on this fall to serve the New England high technology corridors, which at this point are 128 all the way up to south New Hampshire.

Mr. SMITH. Is that all you have?

Mr. KLOSKE. Yes, sir.

Mr. SMITH. Just the three?

Mr. KLOSKE. Four.

Mr. SMITH. Four.

Mr. KLOSKE. By the end of the year.

Mr. SMITH. Tell me a little more. Are they in an office for themselves or are they in conjunction with something else?

Mr. KLOSKE. The Western Regional Office now operates as a self-contained entity in terms of export assistance. The small office that we are going to open in Santa Clara will also be self-contained in terms of providing export assistance.

Mr. SMITH. When you say a small office, describe it.

Mr. KLOSKE. We are going to start with two people plus backup engineering expertise.

Mr. SMITH. What does that consist of?

Mr. KLOSKE. They are basically technical assistance specialists who can advise companies.

Mr. SMITH. Will they be on the ground or be able to communicate with them?

Mr. **Kloske**. Oh, yes. Absolutely. We are going to open the office in the heart of Silicon Valley, so they can communicate directly with all of the companies seeking export assistance.

Mr. **Smith**. But you don't keep all kinds of engineers in each office.

Mr. **Kloske**. No. That is correct. Our engineers are concentrated in Washington, D.C. Now what I have told the industry, and I have made this commitment to various Congressmen, is that we need to provide regular engineering updates to the industry. So we are only going to hire more engineers and send them out in the field, or we are just going to use some of our engineers here and use them on a rotating basis.

Mr. **Smith**. Well, how many places do you need export assistance offices, and what is the criteria for determining whether or not one is needed?

Mr. **Kloske**. We look very carefully at the placement of the industry and the level of demands for export assistance, export licenses that we receive on an annual basis. As I said, California is a natural because of the tremendous demand for export assistance. New England is another natural because of its tremendously active——

Mr. **Smith**. Where is the one in New England?

Mr. **Kloske**. We have made a series of recommendations to the Secretary as to where that office is going to be located. It is probably going to be located somewhere in Massachusetts or New Hampshire.

Mr. **Smith**. Or in New Hampshire?

Mr. **Kloske**. Or New Hampshire.

CRTIERIA FOR OFFICES

Mr. **Smith**. Well, how far apart do they need to be? What are the criteria in determining whether or not there should or should be an export assistance office?

Mr. **Kloske**. Workload.

Mr. **Smith**. Pardon?

Mr. **Kloske**. Workload, sir.

Mr. **Smith**. Workload.

Mr. **Kloske**. Yes, sir.

Mr. **Smith**. Well, the workload comes, doesn't it, from all over the country?

Mr. **Kloske**. Once you fall off from California and the New England corridor and Texas, it just boils down to that. So, again, we regulate America's high technology industries and they are not disseminated throughout the heartland. I mean, you basically have pockets. You have New England—Massachusetts, New Hampshire, Connecticut, and so forth.

Mr. **Smith**. But they are moving, aren't they?

Mr. **Kloske**. Pardon?

Mr. **Smith**. High technology is moving all the time, isn't it?

Mr. **Kloske**. Not necessarily. At this stage the pockets that—or the geographical regions are pretty consistent. Where you see it coming up very fast is Texas, and we handle Texas out of the Western Regional Office, California.

Mr. SMITH. What is involved if somebody in Texas needs to have assistance? They have to go to California?

Mr. KLOSKE. All they have to do is get on the telephone.

We have a state of the art automatic telephone system. We have distribution notes as to what kind of assistance you may need.

Mr. SMITH. Well, if that is the case, then all you need is one.

Mr. KLOSKE. One what, sir?

TELEPHONE ASSISTANCE

Mr. SMITH. One office. If everybody can just get on the telephone.

Mr. KLOSKE. Well, first of all sometimes the telephone lines are overwhelmed. Secondly, sometimes you need to bring in your export license because it may be sensitive, as you may recall from your constituent, and you need to sit down with the export assistance personnel.

What we have tried to do is just locate our outreach efforts in those geographic areas where there is the highest concentration of high technology industry in the greatest demand.

And, I must say the Western Regional Office has been investigated by everybody, it has been a tremendous success. And they have provided a tremendous quality service to both Southern California industry and Northern California industry.

WASHINGTON OFFICE

Mr. SMITH. And they can come into this office, into Washington too, can they?

Mr. KLOSKE. Of course, sir. Yes, sir.

Mr. SMITH. So if they don't happen to be closer or have access there, they can come to Washington?

Mr. KLOSKE. Yes, sir.

Mr. SMITH. Can they get an appointment here?

Mr. KLOSKE. They can get an appointment every time. We have an industry liaison staffer, who works for the industry on a daily, continual basis. In my meetings with the trade associations within the industry, we have indicated to them time after time we are here to serve the American high technology industry, and we try to provide them with the best service that we can.

Mr. SMITH. This sounds like a good argument for why your office ought to be in the center of the United States.

Mr. KLOSKE. Should I pack my bags for Iowa, Mr. Chairman? [Laughter.]

ENGINEER SALARIES

Mr. EARLY. Just a couple of things, Mr. Chairman. That was a tremendous range you gave the chairman as far as the recruitment of engineers, with the private sector paying $120,000 and BXA paying $35,000, I think you said.

Mr. KLOSKE. Yes, sir.

Mr. EARLY. Will you provide for the record anything that could be done to address that within the laws right now?

[The information follows:]

RECRUITMENT OF ENGINEERS

The Bureau of Export Administration faces competition from private industry as well as other U.S. agencies in attracting qualified engineers. Private corporations offer higher salaries and better benefits. Other U.S. agencies use signing bonuses (as much as $10,000) and offer salaries at the top of the Civil Service pay scale to attract talent. Recruitment efforts are also hampered by high-level security clearances which take months to complete.

We have attempted to address these issues by establishing a comparatively high grade structure and providing the additional technical training necessary to keep staff abreast of new technology. We are actively participating in the "Job Fairs" sponsored by the Office of Personnel Management (OPM). We have had a high rate of success in employing engineers using OPM's direct hire authority.

Finally, we are considering trying to obtain better engineering expertise through the creation of a fellowship program.

Mr. **Early**. And, secondly, do you have any loans or details from the big firms, the IBMs, the M.I.T.'s, the big institutions, where, they may give you someone that would serve for a specific period of time?

Mr. **Kloske**. That is a very good question We, obviously, have a bit of a problem accepting engineers that come in from the private sector because we are regulating them so it would create an appearance of a conflict of interest, if not an outright conflict of interest.

However, we have a very ambitious and comprehensive program in which we work directly with the industry through our technical advisory committees. We have 12 advisory committees in various areas of commodity classification, where you have basically five or six members from that particular industry who meet regularly with BXA officials to update them on their concerns and input into the regulatory process.

I am also very interested in tapping into other areas of expertise as we go along. One of the problems that I think we have as a government is that there is a significant disconnect between that regulatory regime and what is going on within the industry because of this tremendous process of acceleration, and we just have to make sure that we can tap into it.

Mr. **Early**. M.I.T., which is in Massachusetts, why won't they give someone a year's sabbatical?

Mr. **Kloske**. That we can do. We are considering, as we are trying to pull hairs out of our head, to try and obtain better engineering expertise, creating a fellowship program, in which we will bring somebody in and say spend some time with us and we can benefit from your expertise, and so forth.

EXPORT CONTROL AUTOMATED SUPPORT SYSTEM

Mr. **Early**. Your comment on automation to the Chairman. It almost seemed like you had implemented the touch and go program as far as you want to put up on the screen exactly——

Mr. **Kloske**. Yes, sir. Well, I must say that is one of the crown jewels of the Bureau of Export Administration, and Mr. Kugelman here, who has a bunch of whiz kids, or maybe elder person whiz kids, working with them, they have done an absolutely fabulous job. I mean, we have the best system in the administration today bar none. We are the model. When other agencies like the Office of

Munitions Control are setting up their automation system they come at us to take a look at it.

It needs improvement. It needs expansion. It needs modernization, and this year and next we are allocating $1.5 million to build on that base.

Mr. **Early**. It would seem to me to be shortsighted, then, to take the $3 million reduction identified with that. One thing about Chairman Smith, you will have to justify a budget. You have done that, and you haven't requested anything else. But, just listening, I question cutting that $3 million on top of it. I mean, we have to stay ahead of it.

We had Secretary Dole before another committee, and in her presentation, she talked about creating new jobs but also about keeping the new jobs, which we don't address. I mean that seems to be what we are talking about here. If you have got this sophistication right now, the committee should consider that, not that we have lots of excess money, but the chairman is not afraid to identify the agencies that are really working to the best of everyone's advantage and to do what someone else suggested we should do.

Mr. **Kloske**. Well, I leave that to the wise judgment of you gentlemen.

Mr. **Early**. I understand that basically all of the work that you've talked about was done in-house.

Mr. **Kloske**. Yes, sir.

Mr. **Early**. I think that compliments the leadership.

HIGH TECH STRATEGIC TECHNOLOGY

Mr. **Smith**. You keep talking about these export licenses being in high tech. Are all of them in high tech?

Mr. **Kloske**. Well, sir, we could spend weeks, if not years, defining what is high technology and what is truly strategic technology. That is why you have three bureaucracies that spend an enormous amount of time trying to define what is truly sensitive and what is not so sensitive.

EXPORT LICENSES

Mr. **Smith**. Do you have anything that shows the distribution of the people who have applied for export licenses?

Mr. **Kloske**. Oh, yes, sir. I would be happy to send you that material. It is a real eye-opener, Mr. Chairman, when you see the industries that we regulate, the level of dollar volume that is involved, around $210 billion.

Mr. **Smith**. Is it by State?

Mr. **Kloske**. Yes, sir.

Mr. **Smith**. Is there a breakdown below State level?

Mr. **Kloske**. No, sir.

Ms. **Mc Entee**. Right now it is only by State, Mr. Chairman.

Mr. **Smith**. Then it is the number of licenses. It is not per capita or something, it is the number of licenses within each State?

Mr. **Kloske**. And dollar volume.

Mr. **Smith**. And dollar volume. Is that on a map?

Mr. **Kloske**. Yes, sir. No problem.

Mr. SMITH. I would like to see it, and we might want to put it in the record.

Mr. KLOSKE. We will provide that to you, Mr. Chairman.

Mr. EARLY. Mr. Chairman, I would like to see that too.

Mr. SMITH. Yes.

[CLERK'S NOTE.—The following was submitted for the record, 2 maps were also submitted but were retained in the Committee files.]

Bureau of Export Administration

Export Applications Received by State: Alphabetically

07-Mar-90

	January 1, 1989 through December 31, 1989	Applications	Value	Avg. Value
1	Alabama	322	$719,109,801	$2,233,000
2	Alaska	9	$18,125,010	$2,014,000
3	Arizona	1,438	$845,276,287	$588,000
4	Arkansas	15	$348,755	$23,000
5	California	23,167	$88,337,086,060	$3,813,000
6	Colorado	1,288	$2,016,483,744	$1,566,000
7	Connecticut	1,784	$1,155,925,855	$648,000
8	Delaware	616	$1,335,277,368	$2,168,000
9	District of Columbia	4,373	$9,316,303,555	$2,130,000
10	Florida	3,686	$3,108,897,319	$843,000
11	Georgia	539	$1,148,761,601	$2,131,000
12	Hawaii	9	$782,955	$87,000
13	Idaho	132	$369,588,821	$2,800,000
14	Illinois	2,225	$1,142,102,968	$513,000
15	Indiana	273	$158,765,064	$582,000
16	Iowa	387	$80,251,831	$207,000
17	Kansas	401	$158,342,156	$395,000
18	Kentucky	137	$73,819,651	$539,000
19	Louisiana	158	$59,638,119	$377,000
20	Maine	17	$1,737,616	$102,000
21	Maryland	1,408	$437,982,254	$311,000
22	Massachusetts	6,488	$4,547,419,484	$701,000
23	Michigan	742	$674,311,469	$909,000
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25	Mississippi	17	$11,232,239	$661,000
26	Missouri	420	$107,418,849	$256,000
27	Montana	17	$404,251	$24,000
28	Nebraska	20	$3,139,172	$157,000
29	Nevada	104	$236,525,555	$2,274,000
30	New Hampshire	477	$201,787,164	$423,000
31	New Jersey	4,206	$16,887,980,423	$4,015,000
32	New Mexico	44	$2,842,322	$65,000
33	New York	6,503	$6,759,345,281	$1,039,000
34	North Carolina	442	$304,096,968	$688,000
35	North Dakota	0	$0	ERR
36	Ohio	1,907	$3,747,735,203	$1,965,000
37	Oklahoma	157	$57,016,232	$363,000
38	Oregon	1,579	$643,318,745	$407,000
39	Pennsylvania	1,666	$1,695,398,205	$1,018,000
40	Rhode Island	158	$125,175,322	$792,000
41	South Carolina	117	$30,209,109	$258,000
42	South Dakota	7	$490,261	$70,000
43	Tennessee	308	$495,428,052	$1,609,000
44	Texas	3,567	$6,156,440,300	$1,726,000
45	Utah	256	$193,609,946	$756,000
46	Vermont	75	$37,496,025	$500,000
47	Virginia	2,668	$2,419,063,473	$900,000
48	Washington	1,105	$13,027,860,971	$11,790,000
49	West Virginia	4	$104,054	$26,000
50	Wisconsin	907	$277,784,291	$306,000
51	Wyoming	1	$2,160	$2,000
52	Other (Including reexports)	3,165	$31,531,887,708	$9,963,000
	Total	81,106	$202,173,007,040	$2,493,000

Bureau of Export Administration

07-Mar-90

Export Applications Received by State: By Number of Applications

January 1, 1989 through December 31, 1989		Applications	Value	Avg. Value
1	California	23,167	$88,337,086,060	$3,813,000
2	New York	6,503	$6,759,345,281	$1,039,000
3	Massachusetts	6,488	$4,547,419,484	$701,000
4	District of Columbia	4,373	$9,316,303,555	$2,130,000
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10	Ohio	1,907	$3,747,735,203	$1,965,000
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26	Kansas	401	$158,342,156	$395,000
27	Iowa	387	$80,251,831	$207,000
28	Alabama	322	$719,109,801	$2,233,000
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33	Rhode Island	158	$125,175,322	$792,000
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35	Kentucky	137	$73,819,651	$539,000
36	Idaho	132	$369,588,821	$2,800,000
37	South Carolina	117	$30,209,109	$258,000
38	Nevada	104	$236,525,555	$2,274,000
39	Vermont	75	$37,496,025	$500,000
40	New Mexico	44	$2,842,322	$65,000
41	Nebraska	20	$3,139,172	$157,000
42	Mississippi	17	$11,232,239	$661,000
43	Montana	17	$404,251	$24,000
44	Maine	17	$1,737,616	$102,000
45	Arkansas	15	$348,755	$23,000
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47	Alaska	9	$18,125,010	$2,014,000
48	South Dakota	7	$490,281	$70,000
49	West Virginia	4	$104,054	$26,000
50	Wyoming	1	$2,160	$2,000
51	North Dakota	0	$0	ERR
52	Other (Including reexports)	3,165	$31,531,887,708	$9,963,000
	Total	81,106	$202,173,007,040	$2,493,000

Bureau of Export Administration
Export Applications Received by State: By Total Value

07-Mar-90

January 1, 1989 through December 31, 1989		Applications	Value	Avg. Value
1	California	23,167	$88,337,066,060	$3,813,000
2	New Jersey	4,206	$16,887,980,423	$4,015,000
3	Washington	1,105	$13.027,860,971	$11,790,000
4	District of Columbia	4,373	$9,316,303,555	$2,130,000
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6	Texas	3,567	$6,156,440,300	$1,726,000
7	Massachusetts	6,486	$4,547,419,484	$701,000
8	Ohio	1,907	$3,747,735,203	$1,965,000
9	Florida	3,686	$3,108,897,319	$843,000
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49	West Virginia	4	$104,054	$26,000
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51	North Dakota	0	$0	ERR
52	Other (Including reexports)	3,165	$31,531,887,708	$9,963,000
	Total	81,106	$202,173,007,040	$2,493,000

Bureau of Export Administration

Export Applications Received by State: By Average Value

07–Mar–90

January 1, 1989 through December 31, 1989

		Applications	Value	Avg. Value
1	Washington	1,105	$13,027,880,971	$11,790,000
2	New Jersey	4,206	$16,887,960,423	$4,015,000
3	California	23,167	$88,337,086,060	$3,813,000
4	Idaho	132	$369,588,821	$2,800,000
5	Nevada	104	$236,525,555	$2,274,000
6	Alabama	322	$719,109,801	$2,233,000
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	Total	81,106	$202,173,007,040	$2,493,000

Mr. **Kloske**. I must tell you, I think in some ways it is one of the best kept secrets in this Nation, again the relationship between the regulatory regime and its impact on the industry.

Mr. **Smith**. Now, these are not just people applying for high tech licenses. They are people applying for licenses——

Mr. **Kloske** [continuing]. Across the board.

Mr. **Smith**. And you have to apply for a license for——

Ms. **Mc Entee**. For anything that is controlled.

Mr. **Smith**. Pardon?

Ms. **Mc Entee**. Anything that is controlled.

Mr. **Smith**. Yes.

Mr. **Kloske**. And since we control everything, everybody has to apply.

RELUCTANCE TO EXPORT

Mr. **Early**. Mr. Chairman, could I ask one more question on that? Several general license procedures have been adopted. However, the justification indicates that private industry has become reluctant to export in the absence of a determination by the Department that the commodity in question qualifies for shipment without a validated license under the term of the general license. Can you tell us why——

Mr. **Kloske**. Again, because we are affected, both in terms of licensing and enforcement, some members of the industry are reluctant to just move forward in this area without spending some time to double check that it is right. Because sometimes some other agency is going to come back to you saying, "Well, we didn't necessarily agree with that. We have a different assessment of the sensitivity of that technology." And that is their concern.

EXPORT ENFORCEMENT

The penalty for an infraction is very severe, sir. If you ship without a license, my export enforcement arm will come after you, kick the door in in the middle of the night, read you your rights, and then I could deny your export privileges for the next 15 years. Which means, if you are a small company depending on exports to maintain your profitability, you are going out of business, sir.

Mr. **Early**. And if you are a big company, you have got problems.

Mr. **Kloske**. You have got problems. For example, if you commit an infraction, I can revoke your distribution license. And your distribution license is a tremendous privilege which allows that company to ship in bulk.

Mr. **Smith**. What if they sell out to another company?

Mr. **Kloske**. Well, we do recurring audits for these companies.

Mr. **Smith**. The penalty——

Mr. **Kloske** [continuing]. Carries with it. Sure.

Mr. **Smith**. Carries with it.

Mr. **Kloske**. Yes, sir.

Mr. **Smith**. Okay. Thank you for coming before us today. We will have additional questions for the record.

Mr. **Kloske**. Thank you, gentlemen.

[The following questions were submitted to be answered for the record:]

QUESTIONS SUBMITTED BY MR. SMITH

STATUS OF AUTHORIZING LEGISLATION

Question:

What is the status of your authorizing legislation for FY 1991?

Answer:

The Authorizing Committees of the House and Senate are currently in the hearing process. Markup by the subcommittee and full committee of the reauthorization of the Export Administration Act, as amended, is expected to take place in April, and floor action is expected in June.

FSX AGREEMENT WITH JAPAN

Question:

What was the Bureau's role in the development of the U.S. policy concerning the agreement with Japan on development of the FSX? What role does the Bureau play in monitoring that agreement?

Answer:

BXA played a lead role in the development of Commerce's policy position on FSX. BXA has been appointed as a member of the Technology Steering Committee (TSC). This committee monitors and oversees implementation of the agreement. BXA officials participated in both TSC meetings held since the approval of the FSX Memorandum of Understanding.

PROPOSED BUDGET REDUCTION

Question:

Your budget reflects a reduction of $642,000 in the management and policy coordination activity. The justification states that these funds are used for studies on export controls and exporter assistance services. What specific studies will be eliminated under this proposal?

Answer:

The amount identified in this decrease was used in FY 1989 to fund two studies: $192,000 to review district field office delivery of export administration assistance services (which has been completed), and $450,000 to cover BXA's share of a Congressionally-mandated study conducted by the National Academy of Sciences to review national security export controls. The study was mandated in the FY 1988 Trade Act and is currently in progress. It is being jointly funded by DOD.

EXPORT ADMINISTRATION

Question:

You are proposing an increase of $410,000 and 10 positions to maintain the exporter assistance staff in Boston, Portland, and Northern California. What was the level of resources and staff assigned to these offices in FY 1990? Since these office have no licensing authority, how will they contribute to the Bureau's efficiency?

Answer:

The Department plans to open the Nashua field office in mid September. The Santa Clara office is scheduled to open in May and Portland in July of this year. The office in New Hampshire will be staffed with six BXA specialists and will serve the Boston/Nashua area as well as the New England region. The Portland location will have two specialists co-located with the International Trade Administration (ITA), and Northern California will have two BXA specialists.

Establishing offices in the Nashua/Boston area, Portland, and Northern California are mandated by statute. They will enable BXA to cover a greater region of the United States through BXA's outreach program efforts.

These new offices will be modeled after the Western Regional Office (WRO) in Newport Beach, California. This office presently serves as a primary link between the exporting community and BXA. The outreach efforts will include: (1) conducting monthly seminars designed to instruct the business community on the use of Export Administration Regulations; (2) counseling exporters on how to interpret and comply with the Export Administration Regulations; (3) submitting license applications for exporters and helping them in following up on the status of their application requests; and (4) providing current information on policy issues and changes pertaining to export controls. Instant engineering advice will also be provided to firms seeking commodity classifications.

FY 1990 costs for opening and staffing these offices are now budgeted at $454,000. These costs include expenses such as equipment and furniture purchases as well as potential employees relocations.

Question:

You are also requesting an increase of $888,000 and nine positions to perform more frequent reviews of the Commodity Control List, as required by the 1988 Trade Act, to process additional requests for commodity classifications and to undertake reviews required by the Trade Act, including reviewing and export control policies of COCOM countries. What is the frequency of your review of the Commodity Control List now?

How would these additional resources speed up the processing of requests for commodity classifications?

What reports that are required by the 1988 Trade Act are you not undertaking at the present time and you would undertake with these additional resources?

Answer:

Under COCOM procedures, the List is reviewed in its entirety every four years. We are presently in Segment A of the List; the current four year review cycle will be completed in September 1993.

The Trade Act requires that a review of all entries be conducted every year. However, events in Eastern Europe have made it very difficult to meet that requirement. We are now in the process of reviewing the List to develop proposals addressing appropriate levels of control for East European countries. While there are also other areas of export control concern to be addressed,--such as streamlining the Control List to reflect current technologies of concern for all destinations--the Eastern Europe proposals have taken precedence. We cannot address all decontrol issues with the current staff level and meet our List Review responsibilities as outlined in the Trade Act at this time.

ELECTRONIC LICENSING SYSTEM

Question:

How many license applications are being submitted to the Bureau now on your electronic licensing system? Has this system resulted in any reduction in either funds or positions?

Answer:

In this fiscal year (October through February) 7,789 of the 30,604 license applications, or 26% have been received via the electronic system. In dollar terms this represents $13 billion in export license applications.

To date this has resulted in a significant reduction (savings) in the level of data entry contract positions. We are seeing a downward trend in the overtime incurred to operate the export licensing process. The resource base in this area continues to shrink as reductions via other Federal cost savings initiatives (Gramm-Rudman-Hollings, pay absorptions, etc.) get implemented. Efficiencies in the electronic system have helped us absorb these reductions.

ARTIFICIAL INTELLIGENCE

Question:

Does the Bureau have any plans to make use of expert systems such as artificial intelligence to assist in the making of licensing decision? What is the anticipated cost and future impact of such systems?

Answer:

BXA developed a prototype expert system for commodity classifications. It was determined by Export Administration that expert systems were inappropriate for use in this area. Accordingly, BXA has not looked at future costs and impacts of such systems.

GENERAL LICENSING SYSTEM

Question:

How has the introduction of the general licensing system with the corresponding decline in the number of individual license applications affected the number of licensing officers required? What has been the impact of this system on the ability of exporters to comply with export control requirements?

Answer:

Expansion of General License authorizations has reduced the number of simple Individual Validated License (IVL) applications. The IVLs eliminated relatively little analytic or interagency review. Higher levels of strategic trade with formerly proscribed countries is expected to increase the number of complex license applications which require significant technical evaluation and involvement of policy officials and other agencies. BXA implemented a budget decrease in FY 1989 in anticipation of potential savings in this area. Experience has not shown any significant savings to date. Accordingly it is too early to determine what long-term effect these changes will have in relation to the number of licensing officers required.

The increase of the use of general licenses will continue to hold the exporter accountable for complying with export control requirements but will make it easier on the exporter because less paperwork is required. Use of both general licenses and individual validated licenses require exporters to keep abreast of all regulatory requirements.

OFFICE OF EXPORT ENFORCEMENT

Question:

In your statement you indicated that the Office of Export Enforcement has developed a strong enforcement program. The FY 1991 budget request for this office is $15 million for eight field offices. The budget justification indicates few prosecutions or convictions, and fines of only $642,000 in 1988. Why have you had only modest success in your enforcement activities?

Answer:

This question prompts several clarifications of our export control enforcement program.

First, the $15 million budget request is for all of the activities of the Assistant Secretary for Export Enforcement, not just the eight Export Enforcement field offices. This amount funds the Office of the Assistant Secretary, the Office of Antiboycott Compliance, the Office of Enforcement Support (previously called the Office of Export Intelligence), the headquarters staff of the Office of Export Enforcement, two overseas attaches and a prorata share of administrative support and centrally-funded support costs (phones, space, etc.).

Second, the mission of the Office of Export Enforcement (OEE) is to prevent violations of the Export Administration Act. It performs this mission in many important ways which do not involve prosecutions or sanctions. For example, through its field offices, OEE contacts exporters to educate them about the export control laws. We also seek their compliance, and ask their help in prevention by reporting suspicious circumstances to OEE. This "Outreach" program is very successful and has helped promote a standard of American industry compliance which is substantial.

Further, OEE spends much of its time applying information it receives to the license application process. OEE identifies the license applications it is interested in, reviews those licenses in light of the information which it has developed, and makes recommendations based upon that information to the Office of Export Licensing. These activities, which often do not lead to a prosecution or administrative action, are vital to the national security since they prevent licenses from being issued when a violation of the EAA is likely. In fiscal year 1989, enforcement license reviews precluded the export of controlled goods valued at approximately one half billion dollars. We suspect that these goods would have been diverted or otherwise shipped in violation of the Export Administration Regulations.

Finally, we do investigate both criminal and administrative cases. Investigating export control violations is difficult, challenging work. The flow of cases is subject to factors outside of the control of the investigators. Thus, we have found that our sanctions tend to fluctuate. This is particularly true of criminal fines which tend to be low because they frequently accompany incarceration with a criminal conviction. Many district judges believe that the incarceration and conviction are sufficient penalties and do not add significant fines.

Administrative penalties are also available to OEE. These have been substantial and effective. In FY 88, fines in export control administrative cases totalled $1.1 million. In FY 89, administrative fines dropped to $383,000. Less than halfway through this fiscal year, administrative fines are $645,000.

Another vital sanction which is available to OEE is the denial of export privileges. An order denying export privileges prevents the respondent from legally participating in an export transaction involving U.S. goods. The denial order is the most effective sanction against persons overseas who divert U.S. technology. In FY 88, 54 parties were denied export privileges. In FY 89, 28 were denied and so far in FY 1990, 27 parties have been denied export privileges.

INDUSTRIAL RESOURCE ADMINISTRATION

Question:

You are requesting an increase of $835,000 and 11 positions for increased responsibilities relating to the review of offsets in defense trade, defense MOU, and direct foreign investments and defense related industries. Could you give us some further details about these additional responsibilities? What is the current workload in each of these areas, and how much do you anticipate it will expand in FY 1991?

Answer:

These additional resources are necessary to carry out our responsibilities for assessing the impact of offsets and for negotiating with foreign governments on offsets in defense trade. BXA is the focal point within the Department for all offset-related issues. These new responsibilities are derived from:

--the Defense Production Act of 1950 (amendments of 1984, and 1986) section 309, which requires an annual report be submitted to Congress on the impact of offsets on the United States. BXA is responsible for the analysis of the impact of offsets on U.S. industrial competitiveness.

--the National Defense Authorizations Act of 1989, Section 825, requires the President to establish an offset policy and enter into negotiations with foreign governments. BXA is a key member of the NSC-Chaired interagency committee now developing an offset policy. Once the policy is set, BXA will participate in consultations with foreign governments.

--National Defense Authorization Act of 1990, Section 816, requires a review of all new defense MOU's to ensure that offsets (associated with them) do not have an adverse impact on the United State's industrial base. BXA will implement this provision in FY 1991 in conjunction with its MOU review program.

Our MOU responsibilities derived from Section 824 of the Defense Authorizations Act of 1989. Under this Act "Memorandum of Understanding" between the United States and foreign countries that relate to research, development, or production of defense equipment will be assessed and closely analyzed to determine what effects they will have on the United State's defense industrial base. The Act also requires that the Secretary of Defense solicit information from the Secretary of Commerce on the effects that Defense MOUs will have on our industrial base. BXA has the responsibility, with DOC, for implementing these provisions of the Act.

BXA's function is to ensure that U.S. trade and industrial competitiveness concerns are considered in the negotiation and implementation of foreign arms sales, co-production, and co-development agreements between the U.S. and foreign governments. In the first year of this program, we received over 80 MOUs for review. We have been unable to respond to DOD in a timely manner due to the lack of sufficient staff. In FY 1991, we expect 100 additional MOU's.

Additional resources are needed in the area of Foreign investment. Section 5021 of the Omnibus Trade and Competitiveness Act of 1988 (the Exon-Florio Provision, which amended Section 721 of the Defense Production Act of 1950), gives the President the authority to make an investigation. An investigation is done to determine the effects on national security of mergers, acquisitions, and takeovers by or with foreign persons which could result in foreign control of firms engaged in interstate commerce in the United States.

BXA is the focal point within the Department. We are tasked with assessing the national security implications of foreign investment for the interagency committee on Foreign Investment in the U.S. (CFIUS). CFIUS has been assigned the responsibility for investigating the impact of foreign investment in defense-related sectors.

Our investigative effort includes: (1) maintaining a database tracking system; (2) coordinating with the intelligence community to investigate possible violations by participants to a transaction; (3) conducting financial and Government activity reviews; and (4) conducting fact finding interviews with various industry, government and academic sources.

We project over 200 notified transactions in fiscal year 1990, in FY 1991 over 400 cases. This escalating caseload of foreign investment reviews, as well as the increasing sensitivity of this issue, demands additional resources if we are going to meet our responsibilities.

QUESTIONS SUBMITTED BY MR. EARLY

FISCAL YEAR 1991 BUDGET REQUEST

Question:

What was the Bureau's FY 1991 request to the Department? And, what was the Department's request to OMB?

What would you be able to do under the Bureau's original request that you will not be able to do under the budget request before us?

Provide for the record a table displaying the bureau's request, the Department's recommendation and the Congressional submission by program areas, amount, positions, and workyears.

Answer:

BXA's request to the Department was $54,715,000 and 625 FTE and to OMB $47,646,000 and 593 FTE.

Our request to the Department included resources to meet the additional workload associated with the screening of license applications related to chemical/biological agents. Two of the Export Enforcement (EE) field offices located in high technology concentrated areas would have received additional staff. One computer assistant would have been added to each of the eight EE field offices to operate EE's enhanced computer system. The system is scheduled to go on-line in 1991.

The following is the distribution of the resource amounts requested for FY 1991:

	Sec. Request	OMB Request	Congressional Request
Management and Policy Coordination........	$2,706	$2,044	$1,993
Export Administration.	30,383	26,074	24,398
Export Enforcement....	17,910	16,464	15,259
Industrial Resources Administration......	3,716	3,064	2,723
Total..............	$54,715	$47,646	$44,373

The following is the distribution of the workyears requested for FY 1991:

	Sec. Request	OMB Request	Congressional Request
Management and Policy Coordination.......	31	31	31
Export Administration.	333	320	310
Export Enforcement....	217	206	199
Industrial Resources Administration......	44	36	36
	===	===	===
Total..............	625	593	576

The following is the distribution of positions requested for FY 1991:

	Sec. Request	OMB Request	Congressional Request
Management and Policy Coordination.......	32	32	32
Export Administration.	339	331	322
Export Enforcement....	225	213	201
Industrial Resources Administration......	51	40	39
	===	===	===
Total..............	647	616	594

Question:

What do you project as a lapse rate for FY 1990 and 1991?

Answer:

BXA used a 25 percent lapse rate for its FY 1990 and 1991 proposed program changes. The only exception is the 10 new positions requested in FY 1991 for the three new field offices. These positions were not lapsed because we expect them to be filled during FY 1990.

Question:

Page 4 of the justification shows a sequester amount of $584,000. However, page 7, which summarizes adjustments to base, indicates a Gramm-Rudman reduction of $717,000. Are you losing more than the amount actually sequestered in FY 1990 from your base in FY 1991?

The justification also shows a decrease of 16 positions related to this $717,000 reduction. Would you explain this?

Answer:

Yes, BXA is losing a total of $1,301,000 from its base over the two years.

Congress originally added 16 positions in FY 1990 to open offices in New England, Northern California, and Portland, Oregon. Since these offices were not opened in FY 1990 and are being funded elsewhere in the budget for FY 1991, the positions are being removed from BXA's budget.

COCOM REPRESENTATIVE

Question:

The FY 1990 bill included funds for a BXA representative to COCOM. What is the status of this? Is a BXA representative now posted in COCOM? If not, why not? What's the problem?

Answer:

Senate Report Number 101-144 directed that $150,000 be made available for a representative of the Department of Commerce to the Coordinating Committee (COCOM). BXA has set aside the funds for the DOC representative.

At present BXA does not have a person in COCOM although we have identified a number of qualified candidates for the position, should State ever approve this position. During the past year and a half, DOC has supplied the State Department with substantial information on the necessity of filling this position. The State Department has formally denied Commerce's request to establish this position. We are in the process of determining what additional steps can be taken to carry out the stated wishes of the Senate.

New England Field Office

Question:

The FY 1990 bill also included funds for three regional export offices including one in the Boston/Nashua area. What is the current status of the Boston office? What is the anticipated opening date?

When will a decision be made on location? What criteria will be used in determining the location of the office?

How many positions will be allocated to the Boston office? Has the bureau complied with the conference directive in determining the number of positions assigned and in ensuring a full service office? What is the full cost for operating the Boston office in FY 1991?

Answer:

The Department plans to open the new regional export office in Nashua, New Hampshire by mid-September. BXA has begun the recruitment process for the six positions initially allocated to the new offices.

The criteria used in deciding on the New Hampshire location included:

--Incentives: New Hampshire has no state income tax. It also provides access to reasonably priced housing. The location, therefore, provides critical incentives for staff to re-locate from Washington. Success of the new office will depend on identifying a core staff of experienced export administration specialists who are willing to relocate on a voluntary basis.

--Rental Costs: Costs are the lowest in relation to the hi-technology market exposure along the Boston-Nashua corridor.

--Wages: Rates are lower in the Nashua area.

--Convenience: Nashua will provide quick access to the uncongested Manchester Airport and is accessible by car for exporters located on the Route 128 corridor.

The full cost of operating the Nashua Office in FY 1991 is estimated to be $371,000. We believe that our approach complies with the Conference Directive. Operations will be closely monitored.

Question:

The justification indicates that $550,000 in permanent budget authority and 12 positions were withdrawn from BXA's base during the FY 1990 budget process. Does any of this need to be restored?

Answer:

No. Enough resources are in the FY 1991 budget to handle all new and ongoing program needs.

Question:

What is the status of the Portland, Oregon and Northern California regional offices? Is the bureau in compliance with the conference directive with respect to these two offices?

Answer:

Yes. BXA is complying with the Conference directive.

Opening of the Santa Clara office is scheduled to take place in May and the Portland office in July of this year. The Portland location will have two specialists co-located with the International Trade Administration (ITA), and Northern California office will have two BXA specialists. In addition, call forwarding will link the Santa Clara office to the WRO in Newport Beach.

Question:

How much did BXA originally request to support these new regional offices in FY 1991? If less than the amount in the budget request, please detail what was disallowed.

Answer:

Based upon the findings of the Price-Waterhouse Study, the Department originally envisioned placing one or two Export Administration Specialists in ITA field offices in 4 cities. The total cost of the original proposal (FY 1991 OMB request) was $285,000 and 6 positions.

OFFICIAL REPRESENTATION

Question:

The budget request includes an increase of $20,000 for "Official Representation" expenses abroad. Why is this increase necessary?

Answer:

In FY 1988, BXA became a separate agency within the Department of Commerce. At that time it had two overseas enforcement offices conducting post-shipment and pre-license checks. At that time we had $5,000 for "Official Representation" expenses abroad. Since that time we have expanded our overseas operations and opened additional offices in New Delhi and Bern. We also have requested State approval for placements in Paris (COCOM) and Hong Kong. These additions, coupled with overseas inflation and increasing operating costs necessitate an increase in

"Official Representation" ceiling. It should be noted these resources will be absorbed out of BXA's base.

WORKING CAPITAL FUND TRANSFER

Question:

Why is BXA proposing to transfer 2 FTE's to the Department's Working-Capital-Fund?

Answer:

BXA is transferring 2 FTE to the Office of the Secretary's Office of Personnel and Civil Rights to directly support BXA's hiring and recruitment needs. The need for this support by BXA will be reviewed on an annual basis. The FTE will be transferred back to BXA when the support is no longer needed.

Question:

What effect will the changes in Eastern Europe have on BXA's responsibilities, particularly the COCOM List and the Matter of Decontrol?

Answer:

Increasing openness of Eastern Europe is providing more and better information on what control-level items are available from the Bloc and other sources. This is facilitating the Foreign Availability program and should support further decontrol determinations.

Assurances from such countries that items available from COCOM will not be used for military purposes or transferred to others without authority from the U.S. will have to be evaluated and monitored. Options for enforcing assurances and agreements are being evaluated.

To the extent dual use items are not used to increase the Warsaw Pact's military potential, we would expect to see freer trade and technical cooperation between East and West.

Liberalizing export controls in response to changes in Eastern Europe will contribute to streamlining controls. BXA has advocated the liberalization of controls of commodities on the COCOM List in the area of telecommunications equipment, computers, and machine tools. Also, we are performing a comprehensive review of the entire COCOM list.

Question:

The budget justification indicates that BXA anticipates a significant increase in license referrals to other agencies, why?

Answer:

As more complex license applications and Bloc requests are submitted to BXA, the number requiring review by other agencies (to address heightened national security, foreign policy, and nuclear non-proliferation concerns) is expected to increase.

1990 PAY INCREASE

Question:

What is the cost of the January 1990 and the SES pay raise for the Bureau in FY 1990? And, what is the amount sequestered? How does the Bureau plan to absorb these costs? What program areas will be affected? How many additional workyears could be funded if you did not have to absorb this amount?

Answer:

The FY 1990 cost of the 1990 pay raise for BXA's general workforce will total $611,373. The SES pay raise is estimated to be $25,000 for FY 1990. The total cost of the 1990 pay raise in FY 1990 will be absorbed. We don't foresee any adverse impacts on FY 1990 program activities. This is because we were able to use our FY 1989 unobligated balances (carryover) to pay for the increased pay costs. Accordingly, we will not have to delay the filling of vacancies this year.

Question:

Please provide for the record a table displaying the allocation of funds and workyears under the FY 1990 appropriation level before and after the pay raise is taken into account.

Answer:

A distribution of funds and workyears follows:

	FY 90 Approp. Before Pay Raise		FY 90 Sequester		FY 90 Approp. After Pay Raise	
	FTE	Amt	FTE	Amt	FTE	Amt
Management and Policy Coordination............	31	$2,583	--	-$36	31	$2,547
Export Administration.........	298	22,286	--	-310	298	21,976
Export Enforcement.	199	15,241	--	-212	199	15,029
Industrial Resources Administration...	27	1,890	--	-26	27	1,864
	===	======	===	====	====	======
Total...........	555	$42,000	--	-$584	555	$41,416

FULL-YEAR COST OF THE 1990 PAY RAISE

Question:

What is the full year cost of the FY 1990 pay raise in FY 1991 and how much is included in your budget request for this purpose? If you are absorbing any portion of this cost, how are you doing so?

Answer:

The full cost of the 1990 pay raise in FY 1991 is $820,045. The total cost is one of the adjustments to our base. BXA is not absorbing any of these costs in FY 1991.

1991 PAY RAISE

Question:

The budget request assumes a 3.5% pay raise in FY 1991. Funds are included for 50% of this raise and of the next phase of the SES pay raise. How do you plan to absorb the remaining 50%? Which programs will be affected?

Answer:

The remaining 50% cost ($342,000) of the 1991 pay raise would be funded by delays in filling positions and a possible hiring freeze . All programs would be affected.

PROPOSED DECREASE

Question:

The budget justification indicates that a $642,000 decrease is being proposed for Management and Policy Coordination as a partial offset to program increases. However, it also indicates that this decrease will be spread to all programs with FY 1991 budget increases. Adding this amount to the proposed absorption for the pay raise, in effect, the programs for which increases are proposed would not really be increased by the amounts shown, would they?

Answer:

Yes, the programs for which increases are proposed would not receive the full amounts as shown.

AUTOMATED DATA PROCESSING

Question:

The justification notes the increased use of automated data processing to improve BXA's cost-effectiveness. What are your plans in this area for FY 1991, and how much is included in your budget request for this purpose?

What was your original request for ADP? If less than the amount in the budget submission, please indicate what was disallowed.

Answer:

All office automation and the Export Control Automated Support System (ECASS) development and operation plans for FY 1991 will be funded within the existing resource base, no additional funds will be required.

The original request for ADP to the Department is the same as the level now proposed in our Congressional request. Base funding for the ECASS is $4,500,000. Another $1.7 million in the base will be used to fund BXA's ongoing office automation needs.

Questions Submitted by Congressman Dwyer

Changes in Eastern Europe

Question:

You are requesting an additional nine positions and $888,000 to review more frequently the Commodity Control List as required by the Trade Act, to process in a timely manner an increasing number of requests for commodity classifications, and to undertake reports required by the 1988 Trade Act, including reviewing the export control policies of COCOM countries.

I understand you and the State Department are considering reducing the "control list" for computers, telecommunications gear and machine tools in light of the changes in Eastern Europe. BXA has also noted that these categories might make up 80% of U.S. high-tech exports and that easing their sales would be the best way to help U.S. manufacturers.

-- Will these 9 additional positions be adequate to accomplish these important goals?

-- What kind of working relationship do you have with the State Department in making such decisions?

-- What kind of resources and staffing does State devote to this important area?

Answer:

In addition to our current staff strength, nine additional positions will be adequate to address streamlining the control list at this time. Assuming the nine positions are approved it will take several months to recruit and train them. Most engineers selected are highly skilled in the commodity area for which they are hired, but they are usually totally unfamiliar with the U.S. and multilateral export control regimes. Nine additional positions, once they are trained, will be adequate to meet the demands of our streamlining schedule in the coming fiscal year.

The State Department's Technical Task Group (TTG) structure, where representatives from the Departments of Commerce, State and Defense meet to consider streamlining proposals, is the arena where U.S. COCOM proposals are agreed to. While our views have not always prevailed in the TTG, we believe the TTG provides an effective and fair process through which the U.S. Government reviews COCOM proposals.

BXA does not have the resource figures for the State Department's staff involved in the multilateral export control process.

Question:

Along these same lines, many believe that the dramatic changes in Eastern Europe have provided the U.S. with an unprecedented opportunity to streamline its own outdated export licensing process, and to take the lead in reforming COCOM (the multilateral export controls system.) Yet many are accusing the Administration of adopting an incremental approach that threatens to handicap U.S. exporters and the fledgling democracies in Eastern Europe.

-- How are you responding to such allegations? And do you anticipate shortage of staff or resources in any way curtailing your mission in this important area?

Answer:

With respect to BXA's export licensing process being outdated, it should be noted that the development and continual improvement of our Export Control Automated Support System (ECASS) has significantly improved the way this agency process an export license request. BXA's automated system is "state of the art."

BXA is actively participating in a COCOM process to develop substantial relaxations in export controls, especially in the areas of computers, machine tools, and telecommunications. We have concentrated on these areas as we anticipate that Eastern Europe will benefit most from these exports as they attempt to modernize their industrial infrastructure. We are optimistic that the upcoming COCOM High Level Meeting (scheduled for early June) will lead to significant progress in this area.

The additional positions (nine) we are requesting in the FY 1991 request will enable BXA to meet its streamlining goals in the months to come.

Prosecution of Export Licensing Officer

Question:

This morning, Frank DeGeorge, the Inspector General told this subcommittee about an investigation, in cooperation with the FBI and U.S. Customs, that resulted in the prosecution of an export licensing officer who was convicted of extortion and soliciting bribes in exchange for improperly authorizing shipments of electronics to China.

-- What was BXA's involvement (if any) in this case?

-- Do you think tighter screening of employees is necessary or warranted?

Answer:

The Bureau of Export Administration worked closely with the Office of the Inspector General throughout the course of the criminal investigation, as well as in the work that followed to identify vulnerabilities and limit the possibility of future abuses. Specifically, in consultation with the Inspector General and other appropriate Commerce offices, BXA undertook the following actions.

o Created a secure area, staffed by an armed guard, to limit unauthorized entry into the licensing area.

o Revised standard operating procedures so that licensing officers are no longer authorized to issue licenses directly.

o Instituted weekly inventory management techniques to monitor the flow of applications.

o Instituted close review (by a supervisor) of all sensitive cases and a random check of non-sensitive cases. No license for a sensitive transaction may be approved without two signatures.

o Upgraded the security checks on all employees, including licensing officers, to include mandatory background investigations for most positions.

o Instituted semi-annual mandatory security and ethics training for all employees.

o Conducted a briefing on the investigation, after the trial, for all employees in conjunction with the U.S. Attorney's office.

- Issued guidance to all employees concerning steps which they should take if they observe unusual behavior by their colleagues or are approached by outside interests.

Based on this experience, we are now more vigilant. However, we are ultimately dependent on the integrity of our employees.

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